

**Part 1 of 2**  
**OREGON**  
**ENVIRONMENTAL QUALITY**  
**COMMISSION MEETING**  
**MATERIALS 04/26/1991**



**State of Oregon**  
**Department of**  
**Environmental**  
**Quality**

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## ENVIRONMENTAL QUALITY COMMISSION

Minutes of the Two Hundred and Eleventh Meeting  
March 11, 1991

### Regular Meeting

The Environmental Quality Commission regular meeting was convened at about 8:35 a.m. on Thursday, March 11, 1991, in Conference Room 3a of the Department of Environmental Quality Offices at 811 S. W. 6th Avenue in Portland, Oregon. Commission members present were: Chair Bill Hutchison, Vice Chair Emery Castle, and Commissioners Bill Wessinger, Carol Whipple, and Henry Lorenzen. Also present were Michael Huston of the Attorney General's Office, Director Fred Hansen of the Department of Environmental Quality and Department staff.

**NOTE:** *Staff reports presented at this meeting, which contain the Department's recommendations, are on file in the Office of the Director, Department of Environmental Quality, 811 S.W. Sixth Avenue, Portland, Oregon 97204. Written material submitted at this meeting is made a part of this record and is on file at the above address. These written materials are incorporated into the minutes of the meeting by reference.*

Chair Hutchison opened the meeting by asking people to turn in a registration form if they wished to present testimony on any item on the agenda. He expressed intent to take the agenda in order, with the possible exception of one item that was scheduled for 11:00 a.m.

### Consent Items

The following items were listed on the agenda as Consent Items:

A. Approval of Minutes of the January 31, 1990 EOC Meeting

A draft of the minutes was circulated to the Commission prior to the meeting.

B. Approval of Tax Credit Applications

The Department recommended that approval be granted on Pollution Control Facility Tax Credit applications as follows:

TC-2036	Praegitzer Industries, Inc.	Fume scrubber, ducting, wiring and wastewater plumbing.
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TC-2310	Boise Cascade Corporation	Landfill bentonite clay liner.
TC-2326	International Paper Co.	Modification and expansion of electrostatic precipitator.
TC-2411	Dow Corning Corporation	Modification to baghouse; installation of fan/ductwork; modification of furnace hood.
TC-2476	Weyerhaeuser Company	Electrified filter bed; fine dust control system.
TC-2533	Ernest & Ruth Glaser	Field flamer tandem axle attached to Cal gas tank.
TC-2576	Boise Cascade Corporation	Landfill leachate conveyance system.
TC-2680	Bill Terpening, Inc.	Installation of one fiberglass tank and piping; cathodic protection on four existing steel tanks and piping, spill containment basins, float vent valves, tank monitor, monitoring wells and line leak detectors.
TC-2794	Dennis Wirth	Straw storage shed.
TC-2855	Linnton Plywood Assoc.	Installation of cathodic protection on four steel tanks and piping, spill containment basins, tank monitor and monitoring wells.
TC-2965	Frank Lumber Company	Bark recovery and preparation facility.
TC-3069	Metrofueling, Inc.	Installation of leak detection and overflow prevention on four underground storage tanks in the form of automatic tank gauges and overflow alarm.
TC-3073	Metrofueling, Inc.	Installation of leak detection and overflow prevention on five underground storage tanks in the form of automatic tank gauges and overflow alarm.
TC-3198	Merritt Truax, Inc.	Installation of leak detection and overflow prevention on four underground storage tanks in the form of automatic tank gauges and overflow alarm.
TC-3211	Merritt Truax, Inc.	Installation of leak detection and overflow prevention on five underground storage tanks in the form of automatic tank gauges and overflow alarm.
TC-3214	G & R Seeds	Installation of drainage tile.
TC-3281	David A. Doerfler	Kello-Built disc 29'; John Deere loader; dump rake 36'.
TC-3282	David A. Doerfler	1977 International tractor; 4450 John Deere tractor; Ford 60FW tractor; 1985 Peterbilt truck; 1984 Freightliner truck; and 3 trailers.

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TC-3283	John Duerst	Kello-Built disc 29; John Deere loader; dump rake 36'.
TC-3284	John Duerst	1977 International tractor; 4450 John Deere tractor; Ford 60FW tractor; 1985 Peterbilt truck; 1984 Freightliner truck; and 3 trailers.
TC-3286	Dennis D. Wirth	Ford tractor; John Deere flail chopper.
TC-3289	P-M Ranch, Inc.	Straw storage shed.
TC-3292	Ken W. Eichler	Straw storage shed.
TC-3296	Edwin J. Rohner	Straw storage shed.
TC-3297	Pimm Farms, Inc.	Ford tractor; Bearcat II Steiger tractor.
TC-3298	Pimm Farms, Inc.	Three New Holland 858 round balers; Rugby 70 bale mover.
TC-3299	Howard Schwanke	505 New Holland baler; GMC 16' flatbed truck.
TC-3300	Oak Creek Farms, Inc.	Ford TW-35 tractor.
TC-3305	Shirtcliff Oil Company	Installation of seven fiberglass tanks and piping, spill containment basins, tank monitor system, turbine leak detectors, an overfill alarm and monitoring wells.
TC-3308	Don and Laura Christensen	Straw storage shed.
TC-3309	G & P Farms	24' straw rake.
TC-3310	Roy A. Bowers & Sons, Inc.	Straw storage shed.
TC-3311	Clyde Montgomery	Straw storage shed.
TC-3313	Jim's Market	Installation of three fiberglass tanks and piping, spill containment basins, float vent valves, monitoring/observation wells and underground preparation of the site for a tank monitor.
TC-3315	Bill Terpening, Inc.	New installation of five fiberglass tanks and piping, spill containment basins, tank monitor, float vent valves, overfill alarm, line leak detectors, breakaways, sumps, oil/water separator, Stage I & Stage II vapor recovery equipment and piping and monitoring wells.
TC-3316	Truax Corporation, Inc.	Installation of one fiberglass/steel composite tank, fiberglass piping, cathodic protection anodes, spill containment basins, line leak detectors and automatic shutoff valves.

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TC-3317	Truax Corporation, Inc.	Installation of cathodic protection on three steel tank and piping systems.
TC-3319	Truax Corporation, Inc.	Installation of epoxy tank lining in one tank and a spill containment basin.
TC-3320	Truax Corporation, Inc.	Installation of epoxy tank lining in four steel tanks, spill containment basins and automatic shutoff valves.
TC-3321	Truax Corporation, Inc.	Installation of cathodic protection anodes on four tanks and piping, spill containment basins, line leak detectors and automatic shutoff valves.
TC-3322	Truax Corporation, Inc.	Installation of fiberglass piping in four tank systems, spill containment basins and line leak detectors.
TC-3323	Truax Corporation, Inc.	Installation of epoxy tank lining in three tanks, spill containment basins and automatic shutoff valves.
TC-3328	Truax Corporation, Inc.	Installation of three fiberglass/steel composite tanks, fiberglass piping, spill containment basins, line leak detectors, automatic shutoff valves, sumps and monitoring wells.
TC-3331	Truax Corporation, Inc.	Installation of three fiberglass/steel composite tanks, fiberglass piping, cathodic protection anodes, spill containment basins, line leak detectors, sumps and monitoring wells.
TC-3350	Peter Kryl	Installation of epoxy lining in one steel tank and spill containment basins.
TC-3351	Wilson Motors, Inc.	Installation of epoxy tank lining, cathodic protection on tanks and piping, spill containment basins, tank monitor and monitoring wells.
TC-3352	Western Stations Co., Inc.	Installation of two STI-P3 tanks and one dual containment double wall steel/plastic composite tank, fiberglass piping, spill containment basins, tank monitor, float vent valves, overflow alarm, monitoring wells and Stage I & II vapor recovery equipment and piping.
TC-3353	Powell Dist. Co., Inc.	Installation of plastic/steel composite tanks, double wall fiberglass piping, spill containment basins, tank monitor, line leak detectors and piping for Stage II vapor recovery.
TC-3354	Everett E. Miles, Jr.	Installation of four STI-P3 tanks, fiberglass piping, spill containment basins, float vent valves, tank monitor, line leak detectors and monitoring wells.

C. Authorization for Rulemaking Hearing on Rule Amendments Relating to Charging a Fee for Yard Debris Collection

This item requested authorization to proceed to rulemaking on proposed rule revisions to clarify the specific circumstances under which a fee could be charged for collection of residential yard debris. Current law prohibits a higher charge for collection of source separated recyclable material than would be charged for collection and disposal of the same materials as solid waste. Yard debris collection involves substantial volumes of material which are generated seasonally and on a sporadic basis. Yard debris collection was not considered when the statute was enacted. The Department of Justice has advised that the Commission has some ability under the law to consider volume based rates for this material.

The proposed rule, as presented in Attachment A, would allow an additional fee to be collected for yard debris collection in an area where yard debris is designated as a "principal recyclable material" (currently only in the Portland metropolitan area). The rule would provide that the base rate for garbage collection would include one additional can per month of yard debris. Quantities greater than one can per month could be charged an additional fee that would be less than the rate charged for collection of the same volume of additional garbage. The rule would sunset on June 1, 1993, to provide for evaluation to determine whether the rule should be dropped, modified or re-enacted.

In addition, the Department proposed two housekeeping amendments to provide for a new method of centralized reporting of recycling data and to enable used oil to be burned for energy recovery.

D. Authorization for Rulemaking Hearing on Proposed Amendments to On-Site Sewage Disposal Permit Fees

This item requested authorization to hold a rulemaking hearing on proposed fee increases for permits and approvals in the on-site sewage disposal program as presented in Attachment A. Statute authorizes fees to be established at the level necessary to recover the costs of operating the program and providing the service. The on-site program is operated by DEQ staff in 13 counties. In 23 counties, the County operates the program as an agent of DEQ pursuant to a contract. The EQC rule establishes the fees charged by DEQ in the 13 counties, and the maximum fees that can be charged by the contract counties. The proposed increase in fee levels is needed to recover the costs of operation of the program. The Department's budget proposal includes the fee increases to support existing activities and to fund additional staff to handle projected workloads and reduce lengthy delays currently experienced by permit applicants. Legislative approval of the Governor's recommended budget would be necessary before the proposed fees would become effective.

The Department also recommended addition of a technical rule amendment as an addendum to the hearing authorization request. The technical rule amendment would allow temporary placement of a mobile home under hardship conditions to provide housing either for a person suffering hardship and in need of special care, or the person providing the care. The current rule provides for the hardship temporary placement but unnecessarily restricts the occupancy to a family member.

The Commission decided to act on each Consent Agenda item separately.

**Action on Consent Item A:**

It was MOVED by Commissioner Wessinger that the Minutes be approved as submitted. The motion was seconded by Commissioner Castle and unanimously approved.

**Consideration of Consent Item B: (Approval of Tax Credit Applications)**

It was MOVED by Commissioner Wessinger that Tax Credit TC-2855 be approved. The motion was seconded by Commissioner Castle and approved with four yes votes and Chair Hutchison abstaining.

It was MOVED by Commissioner Castle that the balance of the tax credits be approved. The motion was seconded by Commissioner Lorenzen and unanimously approved.

Commissioner Castle asked about the status of the tax credit program in the legislative process. Director Hansen responded that the Governor's budget has proposed elimination of the pollution control tax credit program as of June 30, 1991. The Governor believes that loss of the pollution control tax credit will be offset by tax reductions resulting from the approval of Ballot Measure 5. The proposal is yet to be debated by the legislature. Commissioner Castle asked what the magnitude of the change would be on the general fund. Director Hansen stated that the fiscal year impact on the general fund would be in the \$8-9 million range. Commissioner Castle noted the tax credits just approved run up into the millions of dollars and that he continues to be concerned about the appropriateness of the program.

**Consideration of Consent Item C: (Authorization for Rulemaking Hearing on Rule Amendments Relating to Charging a Fee for Yard Debris Collection)**

Chair Hutchison sought clarification on how the proposal would work. Lissa West, Hazardous and Solid Waste Division, explained that the basic garbage collection fee of \$3.50 would cover one can of garbage, and one can of yard debris. Additional cans of yard debris would be extra. Chair Hutchison asked if this fee would aid in stimulating markets and use.



Ms. West responded that some people generate large amounts of yard debris, others generate little. The proposal takes that into account. The rule is proposed to sunset after 2 years to permit evaluation of the initial experience. Jan Whitworth, Hazardous and Solid Waste Division, noted that this topic will be on the April work session to explore more fully the relationship between yard debris collection and the overall recycling system. Director Hansen noted that the definition of a recyclable material is anything that can be recycled at a cost less than or equal to the cost of disposal. This has been interpreted to mean that there shall be no extra charge for recycled materials. In theory, the recycled materials could have been in the garbage can, thus one should not have to pay more because they separated their waste into several containers. Yard debris presents a different issue. Yard debris quantities can exceed what would ordinarily have been in the garbage can, and collection efforts and costs will be different. Therefore, it seems reasonable to consider different treatment for yard debris. What is being proposed is an experiment with a limited test period.

It was MOVED by Commissioner Castle that the Director's Recommendation be approved. The motion was seconded by Commissioner Whipple, and unanimously approved.

**Consideration of Consent Item D:** (Authorization for Rulemaking Hearing on Proposed Amendments to On-Site Sewage Disposal Permit Fees)

Commissioner Lorenzen voiced his perception that the greatest friction between the Department and the public occurs in the administration of the on-site program. He asked for assurance that the fees the Department collects for on-site actions not be used to fund other programs administered by the Department. He expressed a desire to know more about the program with respect to actual costs of administration, how many staff are assigned, and how many more will be assigned to the regional offices to reduce the work backlog of up to 8 weeks. Commissioner Lorenzen expressed a desire for the Department to examine ways to reduce the cost to individuals, and provide additional assistance.

Lydia Taylor, Water Quality Division Administrator, responded that the budget recommended by the Governor includes three additional people for the program. The decision of where these positions would be assigned in the Regions would be made in consultation with Tom Bispham, Regional Operations Division Administrator. Ms. Taylor also stated that the program has had a general fund subsidy of about \$135,000 that the Legislature approved to defray the additional travel costs incurred by the Eastern Region. She stated that none of the fees collected for the on-site program are shifted to any other program.

Commissioner Lorenzen asked if the cost of inspecting a single drainfield was approximately \$245? Sherman Olson of the Water Quality staff responded that it takes approximately 4 hours to conduct a site evaluation if only one visit is made, and an estimated 6 hours if 2 visits are necessary. It costs the Department more to perform the activity than is collected in the fee. Director Hansen advised the fee schedule is applied throughout the state, and added that local governments must be able to recover their costs and may not be able to do

so without action being taken on this request. He also indicated that the Department has been drawing up to \$350,000 per biennium from other fee revenues and other general funded positions to provide the current level of service.

Commissioner Lorenzen asked about proposed hearing locations. Mr. Olson responded that hearings are proposed to be held in Pendleton, Bend, Roseburg, and Portland. Commissioner Whipple asked if the fee levels are at all impacted by Ballot Measure 5. Ms. Taylor responded that this fee proposal is not related to Ballot Measure 5 in any way.

Chair Hutchison asked for an explanation of the need for the technical amendment. Mr. Olson stated there have been no technical amendments to the administrative rules since 1986, and that current rules pertaining to hardship mobile home placements had been previously identified as being too restrictive. The rule limited occupancy of the mobile home to family members suffering physical hardship or mental impairment. The proposed modification would eliminate the family member restriction and permit the care giver or person suffering hardship to use the mobile home.

It was MOVED by Commissioner Wessinger that the Department recommendation, including the technical amendment, be approved. The motion was seconded by Commissioner Lorenzen and unanimously approved.

## **Rule Adoptions**

### **E. Proposed Adoption of Rule Amendments to the Hazardous Waste and Polychlorinated Biphenyl (PCB) Rules**

This item recommended that the Commission adopt rule amendments to the Hazardous Waste and PCB rules as presented in Attachment A of the staff report. The proposed rules would adopt by reference federal hazardous waste corrections, regulations and amendments promulgated under the Resource Conservation and Recovery Act (RCRA), the Hazardous and Solid Waste Amendments of 1984 (HSWA) and the Toxic Substance Control Act (TSCA). The proposed rule adoption was necessary for Oregon to retain authorization from the Environmental Protection Agency (EPA) to implement the base RCRA program and HSWA regulations in Oregon in lieu of EPA. The Department noted that the current EQC approved program for regulation of chlorofluorocarbons (CFCs) is more stringent than the federal provisions. The Department therefore did not propose to adopt the federal CFC provisions. The Department proposed to evaluate the environmental benefits of retaining a more stringent program and return to the Commission with a recommendation in the future.

A public hearing was held on the rules. Eight people attended, but no one presented oral or written testimony on the proposed rules.

Director Hansen noted that the program to regulate PCB's could not be delegated to the state. PCB's are regulated by EPA under TSCA. The proposed rule simply brings the state into compliance with federal requirements.

It was MOVED by Commissioner Castle that the Department Recommendation be approved. The motion was seconded by Commissioner Whipple and unanimously approved.

**F. Proposed Adoption of Rules for Ranking Inventory of Hazardous Substance Sites**

This item recommended that the Commission adopt proposed rules which establish procedures for ranking facilities on the inventory of hazardous substances sites based on the short and long term threats they pose to public health and the environment. The proposed rules were presented in Attachment A of the staff report. The rules establish a Site Scoring Procedure based on risks associated with actual or potential releases of hazardous substances from a facility. Facility scores are published on the Inventory. Amendments to the Inventory listing rule establish a procedure for notifying owners and operators and providing an opportunity for them to comment on their facilities' scores as sites are added to the inventory.

Director Hansen introduced this item by noting that this issue had been discussed at some length at the Corvallis special meeting. He noted that a public hearing has been held and a number of the public comments were good ones and have been incorporated into the final proposed rules.

Chair Hutchison congratulated the staff for excellent work. Loretta Pickerell reported that although no controversial issues arose in the hearing process, the Department would expect experience in implementing the rules to identify problems that will require some fine tuning.

In response to a question from Commissioner Whipple, Ms. Pickerell noted that the Department tries to focus resources on high priority sites. Limited available data makes it difficult to be sure that the highest ranked sites are indeed the highest priority sites.

It was MOVED by Commissioner Lorenzen that the Department recommendation be approved. The motion was seconded by Commissioner Whipple and unanimously approved.

## **Action Items**

### **G. Portland Airport Noise Abatement Plan: Commission Approval**

This item recommended that the Commission ratify a 5-year comprehensive noise abatement strategy for the Portland International Airport. A summary of the noise abatement strategy was presented in Attachment A.

An initial plan was approved by the Commission in April 1985. Commission rules require an updated strategy to be submitted every five years for evaluation and reauthorization. The EQC granted the Port of Portland an extension of time for strategy submittal at its meeting on April 6, 1990. The extension allowed the Port to complete an air traffic capacity study.

The principal goal of an airport Noise Abatement Plan is to reduce noise impacts caused by aircraft operations, prevent expansion of impacts, and to address noise-related problems within the higher noise impacted areas. This goal is to be achieved through the development of aircraft operational controls and noise compatible land use controls. The updated plan is similar to the 1985 plan with several new and revised noise abatement strategies included. The proposed plan sets forth strategies to deal with future development near the airport.

Keith Phildius, Director of Aviation for the Port of Portland, Sheldon Klapper, Manager of Aviation Planning and Properties and Chairperson of the Airport Noise Abatement Committee, and John Newell, manager of day to day operations that relate to noise abatement programs of the Port described the accomplishments of the Port to date, the noise plan update process, and key recommendations. They noted that the area impacted by airport noise has been significantly reduced by past actions under the plan. They explained the public meeting process used and the type of issues discussed. They noted that they expect things will get slightly better under the proposed noise plan, but that there will still be noise from the airport.

Commissioner Whipple asked if FAA will approve the operational changes called for in the plan. Mr. Klapper responded that FAA will probably approve the plan. Director Hansen asked how much difference results from use of newer aircraft. Mr. Klapper responded that the newer aircraft are substantially quieter, and that 40% of the aircraft using the airport are classified as "noisy".

Stuart Sandler, member of the Noise Abatement Advisory Committee, noted that he was from Sauvie Island, and was discouraged that the plan doesn't seem to extend to them. He was encouraged by some of the changes in the plan including the replacement of aircraft, but had concerns on enforcement of the plan and on the phaseout of the noise program efforts at DEQ.

Jean M. Ridings, representing the Blue Lake/Interlachen Homeowners and a member of the NAAC, expressed concern that her area was heavily impacted by the airport and that the Port does not share the concerns of her area. She stated that hearings held by the Port were inadequate. She noted that planes should go over the river rather than over Blue Lake Park. She also expressed concern about planned elimination of the DEQ noise program.

Steve Lockwood, representing the Oregon Environmental Council, noted that he was also a member of the NAAC and chaired an update committee for the Port, and had chaired the DEQ Noise Advisory Committee. He stated that flights into the Portland airport will increase, and that this increase will offset the benefits expected from newer, quieter aircraft. He stated that any further gains will not be easy. He urged the Department to keep the noise program. He stated there is a need to have someone balance the views of the Port.

Karen Scott, representing the City of Vancouver, presented a letter summarizing Vancouver's concerns on the Noise Abatement Plan. She was particularly concerned about the effects on Vancouver when the cross-wind runway is used. She also expressed concern about the impacts of the capacity enhancement plan which would implement simultaneous take-offs and landings and would direct more flights over Vancouver. Finally, she expressed the view that the plan shifted noise impact areas and did not take a real look at noise reduction. She also expressed concern about elimination of the DEQ noise program. Port of Portland representatives stated they would have the NAAC consider issues raised by Ms. Scott.

Commissioner Whipple asked about military flights. Port representatives responded that they are included in the plan, but the cooperation of the military is "voluntary" and not controllable by the Port.

Frank Howett, from Hayden Island, noted that Hayden Island is heavily impacted by airport noise, but they are satisfied with the plan.

It was MOVED by Commissioner Wessinger that the Department recommendation be approved. The motion was seconded by Commissioner Castle and unanimously approved. Director Hansen noted the expectation that the NAAC would continue to be the focal point for consideration of noise issues related to the airport.

H. Approval of Amendment to the Previously Approved Alternative Plan for Alleviating a Health Hazard in North Albany

This item recommended that the Commission approve an amendment (Attachment A) to the Alternative Plan to Mandatory Annexation for Alleviating the Health Hazard in the North Albany health hazard area. The Commission approved the alternative plan at its meeting on September 21, 1990. The proposed amendment related to sewerage project financing and scheduling. The proposed amendment does not modify the design of the sewer system

project. Passage of Ballot Measure 5 effectively prohibits the North Albany County Service District (NACSD) from using Bancroft Bonds for project financing as proposed in the approved alternative plan.

Martin Loring, Wastewater Finance Section Manager, explained that the Benton County Board of Commissioners had submitted the amendment requesting a delay in project schedule in order to allow time to rearrange project financing or for the health hazard area to voluntarily annex to Albany, which would permit the use of Albany sewer system revenues to secure project financing. He noted that an effort was underway in North Albany to accomplish voluntary annexation by petition.

In response to a question from Chair Hutchison, Benton County Counsel Candice Haines indicated that sufficient petitions had been submitted and that voluntary annexation was likely.

It was MOVED by Commissioner Castle that the Department recommendation be approved. The motion was seconded by Commissioner Whipple and unanimously approved.

**I. Approval of Amendment to the METRO Order on Solid Waste Reduction**

This item recommended that the Commission approve an amendment to the March 3, 1989 EQC order (SW-WR-89-01) requiring METRO to implement a waste reduction program. The amendment was presented in Attachment A of the staff report. The amendment was needed to accommodate METRO's plan for implementing the collection of salvageable building materials. METRO and the Department were in agreement on the amendment. The proposed amendment would essentially extend several compliance dates in the order by one year.

It was MOVED by Commissioner Lorenzen that the Department recommendation be approved. The motion was seconded by Commissioner Castle and unanimously approved.

**Informational Items**

**K. Review of the State/EPA Agreement (SEA) for FY 92**

This item requested EQC review of and comment upon the draft program priorities and expected accomplishments prior to the Department completing negotiations with the Environmental Protection Agency on the State/EPA Agreement. The agreement is annually updated and establishes mutual understanding of program priorities and expected accomplishments for the next fiscal year (July 1, 1991 - June 30, 1992) and becomes the basis for federal funding assistance to DEQ.

Pete Dalke, Administrator of the Management Services Division explained that the draft priorities were consistent with the Strategic Plan. He noted that the draft was out for public comment. Director Hansen noted that the SEA priorities assume that the legislature will fund the Department's budget request, and that changes will be necessary if cuts are made in the budget review process.

No one from the public requested to speak on the matter. Commissioner Whipple asked if the SEA included the programs that may be turned back to the EPA should the requested fee increased not be approved by the legislature. The Department responded that it did. The Commission accepted the report and did not suggest any changes to the priorities.

**L. Commission Member Reports**

Chair Hutchison reported that Commissioner Whipple would be replacing him as the representative of the Commission on the Governor's Watershed Enhancement Board.

**M. Director's Report (Oral Report)**

Director Hansen reported on the following matters:

1. **Mining Rules** -- Hearing notices will go out soon for hearings to be held in late April.
2. **Bergsoe, St. Helens** -- An informational meeting was held in St. Helens recently to discuss Bergsoe site. As a part of the bankruptcy settlement, 30,000 tons of lead contaminated slag and matte will be removed from the site. The removal will begin March 18 and should be completed in six weeks. There will also be some additional air monitoring at the site. A prospective purchaser is looking at the site. There are still concerns about groundwater contamination at the site.
3. **Portland Sludge Spreading on Range Land in Eastern Oregon** -- The application submitted by the City of Portland in conjunction with the property owner for spreading additional amounts of treated sewage sludge (above agronomic application rates) on range land in Eastern Oregon has been withdrawn because added information needed by the Department was lacking. If the application is re-submitted, additional information and public involvement will be required. The Department strongly supports the beneficial use of sludge.

Commissioner Lorenzen asked about the claims of elevated levels of PCB and Dioxin in the sludge and whether this poses any problem for utilization at the lower levels being applied. Tom Bispham, Administrator of the Regional Operations Division, reported the Health Division has indicated that the levels in

the sludge are considered to be safe when the sludge is spread on land at agronomic rates.

4. **Portland Permit** -- The NPDES Permit for the Portland Columbia Boulevard Sewage Treatment Plant is up for renewal. Portland has experienced some compliance problems, and is faced with combined sewer overflow issues. Portland is committed to making changes and upgrading their system. Correction of combined sewer overflows is a major problem to be addressed. The Department is preparing a renewal permit that will require the City to meet water quality standards year around in all water bodies. Northwest Environmental Advocates has filed a 60 day notice of intent to file suit related to unpermitted combined sewer overflow discharges.
5. **Storm Water Permits** -- There is new requirement that all stormwater discharges be permitted above certain levels. This is a new EPA requirement coming out of a lawsuit settlement. There will be a major issue of how to address stormwater from parking lots, streets, etc. There is great concern nationally about the number of sources to be permitted under this new requirement. Most states are of the opinion that they cannot handle the workload associated with these new requirements and are considering leaving implementation to EPA.
6. **Multi-Media Inspections** -- These are inspections that look at the overall effects of the full spectrum of pollutants (air, water, etc.) coming from the same source. The first problem is to get the appropriate inspectors into the facility at the same time to provide a comprehensive look. EPA is proposing a relatively large scale effort across the nation to conduct such multi-media inspections. Our concern is that EPA is proposing to conduct these inspections without regard for the fact that responsibilities for regulation may have been formally delegated to the states. States believe EPA should allow the states to be responsible or at least approach such inspections on a partnership basis. EPA has agreed to consider the state concerns.
7. **Combined Sewers Generally** -- Combined sewers are a problem in nearly all older communities in the country where a single pipe system was constructed for sewage and storm water. Newer communities have built separate storm water and sanitary sewer systems. Dealing with this problem nation wide will be extremely expensive. Requests for federal funding to assist in dealing with combined sewer overflow correction are being made, but appear to have a long way to go.



## **Public Forum**

John Hilley, representing the Committee to Save Oregon's Noise Program, testified that noise causes health problems, and that the DEQ noise program is cost effective and needs to be preserved.

Lewis Scott, Chair of the Beaverton Planning Commission, urged retention of the noise program. DEQ provides needed equipment to cities, and the DEQ rules provide a basis for cities to site and design facilities to control noise problems.

Lee Poe, representing the Portsmouth Neighborhood Association Noise Abatement Coordinating Committee, expressed concern about noise from race tracks, railroads, airports, motor vehicles, and industries. Noise causes adverse health effects. The only relief comes from DEQ. She urged retention of the noise program.

Pam Arden, representing the Kenton Neighborhood Association, presented a letter from the Association opposing any reduction in the noise control program when an increase is needed. She urged a fee for noise pollution to assist in funding of the program.

Sherry Patterson, representing the Rosewood Action Group, urged retention of the noise program because noise adversely affects business as well as families. She urged a broader forum for public input on the proposed elimination of the DEQ noise program.

Chair Hutchison advised that the issue of the noise program would be discussed further during the work session discussion on the budget.

### **J. Motion by Boise Cascade Corporation for an Order Identifying Issues in the Contested Case on NPDES Permit No. 100715 Issued to the City of St. Helens**

Boise Cascade Corporation filed a motion for an order from the Environmental Quality Commission identifying issues in the Contested Case on the permit issued to the City of St. Helens. Notice was issued that the Commission would consider, and may act upon, the motion at the March 11 meeting. Parties to the contested case were allowed to submit written memoranda on the motion, providing that all written materials were received no later than March 4, 1991. Parties were advised that 10 minutes would be allowed for oral arguments by each party.

Michael Huston, Assistant Attorney General, opened the discussion by noting that four or perhaps five parties involved in the contested case proceeding appeared to be present. He noted that Boise Cascade made the motion and that they have been joined by James River and the City of St. Helens. They are represented by Richard Baxendale for Boise Cascade, John Gould for James River, and Peter Linden for St. Helens. Mr. Huston suggested that

it might be appropriate to have those groups go first. Mr. Bonine representing NCAP and Columbia River United would then appear, and finally Larry Edelman representing the Department.

The Chairman advised that pursuant to the notice, ten minutes would be allowed per party for statements, followed by five minutes for rebuttal by the moving party.

Richard Baxendale, representing Boise Cascade and the City of St. Helens, explained why they brought the motion forward, summarized its essential terms, and commented on points raised in opposition by NCAP and the Department. He noted that a permit had been issued to the City of St. Helens. A contested case hearing was requested by the City and other parties. The Hearings Officer adopted a schedule requiring the parties to file issue statements. Statements were filed which identified legal, policy and factual matters that the Commission will be required to rule upon. The final contested case decision by the Commission must be based solely on the record produced in the hearing. Nothing in the rules limits the issues that can be raised in a contested case hearing on an NPDES permit. He further noted that the EQC, as governing body of the Department, has at least as much authority and discretion as the Department has in establishing permit limits. The Commission can make adjustments in the permit based upon evidence in the record. The Commission is not simply limited to reviewing the action taken by the Department for factual and legal errors. The motion was made because the Department and NCAP claim that the issues raised in the motion are not properly before the Commission. He therefore requested a ruling that indeed the issues raised are properly before the Commission so that evidence may be prepared and presented in the most direct and lowest cost manner. He noted they are not asking for any decision on substantive issues at this time.

Mr. Baxendale noted that their first two questions stem from the interpretation of OAR 340-41-205(p)(B) and (C). These sections provide that the 0.013 ppq established for dioxin shall apply unless data from scientifically valid studies demonstrate that the most sensitive designated beneficial uses will not be adversely affected by exceeding a criterion or that a more restrictive criterion is warranted to protect beneficial uses, as accepted by the Department on a site specific basis. Therefore, his clients wanted clear authority to present evidence on (1) issues related to adverse impact to beneficial use associated with exceeding the dioxin criterion of 0.013 ppq, (2) the risk level, cancer potency, fish consumption and bioaccumulation factors that relate to the dioxin criterion, and (3) whether the waste load allocation for the City of St. Helens could be greater than the 0.27 milligrams per day included in the permit.

Commissioner Lorenzen asked for further discussion on the phrase "as accepted by the Department on a site specific basis" as it relates to the ability to review the entire criteria. Mr. Baxendale stated that he does not believe that language requires or implies any limitation on the scientific demonstration that can be made in the hearing. He noted that this language has been cited by the Department as requiring them to show something peculiar about the St. Helens facility to trigger their ability to present scientific evidence on the appropriate

water quality criteria. They disagree with the Department's interpretation and believe that the limitation does not focus on the site itself, but describes the circumstances when they can make the showing -- i.e. in the context of an individual permit proceeding. Mr. Baxendale noted that they are not proposing to modify the 0.013 criterion as suggested by NCAP. He also noted that they disagree with DEQ's argument that the Department has evaluated the type of evidence sought to be introduced by Boise Cascade. They believe the Commission has the right and obligation to decide the matter based on the record (as opposed to the Department).

With regard to the issue on the waste load allocation, Mr. Baxendale argued that they should be able to present evidence on the permit limit, which is based on a draft Total Maximum Daily Load (TMDL) study conducted by EPA and finalized about two weeks ago. He indicated they are not challenging EPA's TMDL in this proceeding. They simply want the Commission to adopt a new TMDL and associated Waste Load Allocation (WLA) if evidence presented shows that different numbers are warranted. EPA developed the TMDL and WLA because Oregon refused to do so. Oregon has an obligation to review the TMDL and WLA because they are too restrictive.

Commissioner Lorenzen noted his understanding that under administrative law, in a contested case, the Commission acts in an adjudicative mode where the Commission is bound by certain standards of proof and the parties bear a certain burden of proof. When water quality standards are set, the Commission acts in a legislative mode where less clear policy issues may be considered. He wondered if there was a potential conflict between analyzing the issue of the water quality standard regarding this specific permit in an adjudicative proceeding as opposed to trying to establish an overall level in a legislative proceeding. Mr. Baxendale replied that there may be some concern in making those decisions, however, the rules allow permittees to challenge and raise those issues on an individual permit basis. Commissioner Lorenzen asked if that was an individual permit or an individual site basis. Mr. Baxendale stated they believe the rule language refers to an individual permit proceeding rather than a particular physical site.

Commissioner Whipple asked if there was new evidence to be presented that was not available when the initial standard was set. Mr. Baxendale said that the science has changed since the standard was adopted.

John Bonine and Cherie Howe appeared representing the Northwest Coalition for Alternatives to Pesticides (NCAP) and Columbia River United (CRU). Mr. Bonine stated that to grant the motion requested by Boise Cascade will undercut the pollution control program in the state of Oregon. Mr. Bonine indicated there were two major points which overlay the arguments made by the mills as follows:

- All factual, legal, and policy issues that are relevant to the permit are properly before the Commission for decision.

- Nothing in the regulations or any other provision of law limit the scope of issues in a contested case hearing on an NPDES permit.

Mr. Bonine stated that these assertions are wrong as a matter of administrative law, as a matter of federal and state water pollution law, and as a matter of proper interpretation of subsection (C) of the cited rule.

Ms. Howe reviewed the ways the water quality program in Oregon is run and the two types of standards that apply. There are both water quality standards, and feasibility (technology) based standards. Where binding water quality standards are established, there is no ability to substitute another standard at will. Therefore, the subsection (C) option is not available in this case.

Mr. Bonine stated that they believe the existing standard for dioxin is too lax, but that they have no right to challenge it in this contested case proceeding. He further stated that their remedy was either to go to rulemaking to modify the numerical standard or to make the case that other narrative standards requiring protection of health and wildlife demand lower effluent limits. Mr. Bonine stated that Boise Cascade can ask for a new TMDL, but that should be done by rulemaking and not in this contested case proceeding. Mr. Bonine also disagreed with Boise Cascade's interpretation of the Marbet case regarding the ability of the Commission to set policy in a contested case. He suggested that the Marbet case does allow policy setting if it is turned into a joint contested case/rulemaking proceeding.

Commissioner Lorenzen asked about the process of establishing a waste load allocation and whether something like a math error would be subject to review on appeal to the Commission. Mr. Bonine responded that the only recourse for change of the WLA is to petition EPA to change it. He noted that the determination of who gets what piece of the TMDL pie is a general policy making process that must be done by rulemaking. Commissioner Lorenzen asked if the Department can establish a waste load allocation in a permit if the Commission has not engaged in rulemaking to determine the waste load allocation. Mr. Bonine responded that the Department must recognize the federally established waste load allocation. However, if no federal waste load allocation had been established and the Commission had not established a waste load allocation by rule, the Commission could consider the Department decision on appeal.

Larry Edelman, representing the Department, stated the Department position that the wording of subsection (C) means what it says -- it is to be site specific, and it is to be based on unique conditions in the localized area. It was not intended to provide a vehicle to challenge the basic water quality criterion. He stated that Boise Cascade wants to challenge the basic criterion and the factors that make the criterion. Boise has not indicated it wants to make a site specific showing as contemplated by the rule. Rather, the way it means case by case rather specific to a localized area. With respect to the federally adopted TMDL, Mr. Edelman asserted that there is no discretion to deviate from that federal TMDL and waste load allocation. Oregon and the other states asked EPA to take on the TMDL adoption

because of the interstate nature of the river. The EPA TMDL is subject to judicial review in Federal court.

Commissioner Lorenzen asked if the Commission should place this narrow issue before the Hearings Officer and advise that if he concludes the federal TMDL is not binding, then certain evidence would be appropriate for submittal. He noted his discomfort with the potential to miss the opportunity for the hearings officer to focus on the issue of whether the EPA decision is binding on the State. Chair Hutchison asked for clarification of Mr. Edelman's view on the nature of the question Boise is asking. Mr. Edelman stated that he believes Boise is arguing that "site specific" means "permit specific" and that they are really asking for standard setting. In response to a question from Chair Hutchison, Mr. Edelman stated that sub (C) could allow for a deviation from the standard in a specific permit decision for narrowly construed site specific facts.

Mr. John Gould, representing James River, provided rebuttal comments for the moving parties. He indicated they were aligned with Boise Cascade on this matter and have filed their own motion which is identical to the Boise Cascade motion but applying to their Wauna mill. Mr. Gould first addressed the matter of the TMDL. He stated that they disagree that this is a federally captured matter. He noted that the EQC adopted the dioxin standard, and EPA developed the TMDL based on the EQC dioxin standard. He noted that EPA has been asked to adopt a national standard for dioxin and has refused to do so. If they had done so, then the TMDL and Waste Load Allocation would be EPA's. He further noted that EPA has approved higher dioxin levels for Maryland and Virginia. He asked if the Commission didn't think it was odd that they are unable to review a decision that is based on their own standard.

Mr. Gould then asked if the Commission was consulted when the matter was relegated to EPA for development of the TMDL. He also stated that the EPA action is not a rule -- it is a guidance document they have issued and called a final action. Mr. Gould argued that the safety factor included in the Waste Load Allocation is too large, and that the mills are unable to meet their assigned loadings. Therefore, they need to have some of the safety margin allocated to them. He also noted that the EPA document provides for some flexibility to adjust the load allocations on a case by case basis in consultation with the affected state. He urged the Commission to make its own judgement on the waste load allocations and its own policy decision on the safety factor and submit it to EPA for approval.

Mr. Gould then pointed to the preface to the rules in OAR 340-41-001 which states that decisions will be made on a case by case basis based on best available information. He suggested that was what they were asking for.

Chair Hutchison asked about the Department views on best available information and the appropriateness of revisiting the 0.013 ppq dioxin standard. Director Hansen noted that the

Department has reviewed that matter as part of the triennial standards review, and is not recommending any change at this time.

Chair Hutchison noted that while he found Mr. Gould's arguments persuasive, he was inclined to agree with the Department that rulemaking was the appropriate way to deal with the issues raised.

Commissioner Wessinger asked Michael Huston to explain the choices available to the Commission. Mr. Huston responded that this is a motion in an ongoing contested case hearing. It is in everyone's best interest for the Commission to address this issue at this time so the Hearings Officer can adjust the scope of the hearing as appropriate. The decision will be an interim decision, and will become final only when a final order is adopted. However, it is important to be right because the hearing will be built around it. He stated that the issue of whether the Commission is bound by the federal TMDL is a legal issue that can appropriately be addressed to the Hearings Officer. He reminded the Commission that the purpose of a contested case hearing is to allow the parties an opportunity to contest, on a factual and legal basis, the decision the Department made. There is nothing in that process that obligates the Commission to revisit past policies. He noted that all parties appear to concede that sub (C) applies here for some purpose, and that the application of sub (C) can be addressed to that extent. Nothing compels the Commission to revisit the water quality standard unless it cares to do so. Finally, he noted that if the Commission chose to consider the water quality standard beyond the scope of sub (C), it should do so by rulemaking.

Commissioner Lorenzen stated that the materials he has read clearly suggests that sub (C) applies to site specific issues and not permit specific issues. He stated that the parties should be allowed to present evidence that deals with the characteristics of their specific sites that would cause the standard to not apply in their case. He stated that he did not view the water quality standard as appropriate to address in this proceeding because it is more in the nature of rulemaking. If the Hearings Officer were to determine that federal rules do not preempt the state in this matter, then the proceeding should be opened to testimony on the derivation of the Waste Load Allocation.

Commissioner Whipple expressed some concern about Mr. Gould's comments regarding the safety margin. Issues of safety margin should be the subject of broad discussion. She noted that Oregon should be setting the standards that we want the state to be meeting. She was not convinced that a contested case proceeding is the appropriate forum for dealing with these issues.

Chair Hutchison stated that he was persuaded by the Department and that he did not believe this was a case where the site specific exception should be applied. He noted that the questions presented in the motion are more appropriately addressed in a rulemaking proceeding.

It was MOVED by Commissioner Castle that requests of Boise Cascade and James River for a motion identifying issues be denied. The motion was seconded by Commissioner Wessinger and approved with four yes votes and Commissioner Lorenzen voting no.

Public Forum (continued)

Mikey Jones, from Amity, reviewed the history of his involvement in efforts to secure cleanup and protection of Columbia Slough.

Lee Poe, representing the North Portland Odor Abatement Committee, requested action to deal with odor from the City of Portland's Triangle Lake sludge holding pond.

N. Legislative Update (Oral Report)

Director Hansen reported that the Department's enforcement bill has passed out of the Senate Agriculture and Natural Resources Committee. The recycling bill has been consolidated with other similar bills and work groups are working on reaching consensus on a variety of issues. The air fee bill had a rough hearing. The proposed fee related to automobiles is the biggest issue.

Pete Dalke, Administrator of the Management Services Division, presented some summary sheets which break out the various program components in the Department Budget. He advised that the Department is scheduled to be before the Ways and Means subcommittee in early April. The budget review is expected to be very detailed.

Director Hansen noted that there is no federal mandate for a noise program. The current program is funded totally from the general fund. He noted that the Department proposed a continued program with three positions. The Governor recommended elimination of the program as a means to achieve necessary general fund spending reductions. Steve Greenwood, Administrator of the Air Quality Division, reviewed the Department's noise program strategy. The Department proposes to retain noise regulations, to continue the noise testing in conjunction with the vehicle inspection program, to make DEQ noise testing equipment available to local governments, to provide training and technical assistance to local governments on adoption of local noise programs and use of equipment, and to advise local governments of their options for enforcing noise requirements. A letter will be sent to local governments inviting them to workshops around the state in the spring.

The meeting was then recessed for lunch and reconvened at 2:00 p.m.

## **Work Session**

### **O. City of Portland Clean River Program**

Mary Nolan, Administrator of the City of Portland Bureau of Environmental Services, and Jeff Bauman, water quality manager for the City presented a summary of the City of Portland's Clean River Program. This program was adopted by the City Council in April 1990. The program seeks to conduct the monitoring, planning, regulation, public education and outreach necessary to prepare for water quality improvements. It also seeks to implement specific pollution control measures. These include projects in the City's Capital Improvements Program, property acquisitions for future facilities, demonstration projects, and enhanced maintenance projects. Current projects include the Ramsey Lake wetlands combined sewer overflow polishing project, storm water sump construction, sewer separation, stream bank restoration, and storm water detention.

### **P. Emergency Response: Discussion and Status and Capability**

Tom Bispham, Administrator of the Regional Operations Division, briefly reviewed the Department program and efforts on emergency response. The Department had previously briefed the Commission on part of the overall effort related to drug lab cleanup. Spill response relates to oil and hazardous materials.

### **Q. Operating Plan and Strategic Plan: Update and Discussion**

Director Hansen noted that written information provided included quarterly status on current biennium operating plans, and a draft of potential revisions of Strategic Plan goals. Following approval of the budget for the 1991-93 biennium, the Department will prepare new operating plans.

### **Other Business**

Director Hansen advised the Commission that a telephone conference call will be held each Tuesday morning at 8:00 a.m. to update the Commission on current legislative matters.

There was no further business, and the meeting was adjourned at about 3:20 p.m.



**State of Oregon**  
**ENVIRONMENTAL QUALITY COMMISSION**

**A G E N D A**

**WORK SESSION -- April 25, 1991**

DEQ Conference Room 3a  
811 S. W. 6th Avenue  
Portland, Oregon  
**1:00 p.m.**

1. Review of Air Quality Program
2. Charges for Recycling: General Discussion
3. Water Quality Standards: Review of Issues and Status Report on Triennial Review Process
4. Combined Sewer Overflow Strategy: Overview and General Discussion
5. Proposed Stipulated Order for Portland: Summary of Order and Public Comments

*NOTE: The purpose of the work session is to provide an opportunity for informal discussion of the above items. The Commission will not be making decisions at the work session.*

**REGULAR MEETING -- April 26, 1991**

DEQ Conference Room 3a  
811 S. W. 6th Avenue  
Portland, Oregon  
**8:30 a.m.**

**Consent Items**

*NOTE: These are routine items that may be acted upon without public discussion. If any item is of special interest to the Commission or sufficient need for public comment is indicated, the Chairman may hold any item over for discussion. When a rulemaking hearing is authorized, a public hearing will be scheduled and held to receive public comments. Following the hearing, the item will be returned to the Commission for consideration and final adoption of rules. When rules are proposed for final adoption as Consent Items, a hearing has been held, no significant issues were raised, and no changes are proposed to the original draft that was authorized for hearing.*

- A. Approval of Minutes of the March 7-8, 1991 EQC Meeting

- B. Approval of Tax Credit Applications
- C. Authorization for Hearing on Proposed Amendments to the Underground Storage Tank (UST) Rules
- D. Authorization for Rulemaking Hearing on Rules for Hazardous Waste Fees, Hazardous Waste Generator Registration, and Hazardous Waste Reporting
- E. Authorization for Rulemaking Hearing on Proposed Amendments to Industrial Waste Permit Fees
- F. Authorization for Rulemaking Hearing on Proposed Rules Describing the Process for Establishment of Instream Water Right Flows for Pollution Abatement
- G. Authorization for Rulemaking Hearing on Proposed Modification to Grant Relief from the Continuous Emission Monitoring Requirements for Small Sources in the Medford AQMA

### **Rule Adoptions**

*NOTE: Hearings have already been held on these Rule Adoption items; therefore any testimony received will be limited to comments on changes proposed by the Department in response to hearing testimony. The Commission also may choose to question interested parties present at the meeting.*

- H. Proposed Adoption of Amendment to the Industrial Volatile Organic Compound (VOC) Rules for Portland Ozone Non-Attainment Area
- I. Proposed Adoption of Rules for Stage II Vapor Recovery
- J. Proposed Adoption of Rules on Recycling and Solid Waste Planning Grants

### **Action Items**

- K. Request for Extension of a Variance from Rules Prohibiting Open Burning of Solid Waste, (OAR 340-16-040(2)) for 19 Disposal Sites
- L. Request by Oremet Titanium for an Increase in Permitted Discharge Limitations for Total Dissolved Solids

### **Information Items**

- M. Commission Member Reports: (Oral Reports)
  - Governor's Watershed Enhancement Board

- N. Director's Report (Oral Report)
- O. Legislative Update (Oral Report)

### **Public Forum**

*This is an opportunity for citizens to speak to the Commission on environmental issues and concerns not a part of the agenda for this meeting. Individual presentations will be limited to 5 minutes. The Commission may discontinue this forum after a reasonable time if an exceptionally large number of speakers wish to appear.*

*Because of the uncertain length of time needed, the Commission may deal with any item at any time in the meeting except those set for a specific time. Anyone wishing to be heard on any item not having a set time should arrive at the beginning of the scheduled meeting to avoid missing any item of interest.*

*The next Commission meeting is tentatively scheduled on Friday, June 14, 1991, at DEQ offices in Portland, Oregon. A brief work session is tentatively scheduled at the same location on June 13, 1991.*

*Copies of the staff reports on the agenda items are available by contacting the Director's Office of the Department of Environmental Quality, 811 S. W. Sixth Avenue, Portland, Oregon 97204, telephone 229-5395, or toll-free 1-800-452-4011. Please specify the agenda item letter when requesting.*

*April 11, 1991*

Approved \_\_\_\_\_  
Approved with corrections \_\_\_\_\_  
Corrections made \_\_\_\_\_

MINUTES ARE NOT FINAL UNTIL APPROVED BY THE EOC

**ENVIRONMENTAL QUALITY COMMISSION**

Minutes of the Special Phone Conference Update on Legislation  
April 2, 1991

The Environmental Quality Commission legislative update telephone conference meeting was convened at about 8:00 a.m. on Tuesday, April 2, 1991. Participating in the conference call were Chair Bill Hutchison, Vice Chair Emery Castle, Commissioners Bill Wessinger and Carol Whipple, and John Loewy and Harold Sawyer of the Department staff. The public could participate by speaker phone in Conference Room 3b of the Department of Environmental Quality Offices at 811 S. W. 6th Avenue in Portland, Oregon. No members of the public were present.

John Loewy reported on the status of HB 2175, the Comprehensive Air Fee bill. Two hearings had been held. The House Environment and Energy Committee chair had advised that only the industrial fee component of the bill would move forward. Industry representatives were meeting to develop their fee proposal for presentation to the Committee.

Mr. Loewy advised that the Oregon Environmental Council had introduced a bill into the Senate that was similar to HB 2175 but with higher fees. He expected a broader fee bill to emerge from the Senate. A conference committee will likely resolve the differences between the House and Senate approaches.

Bob Danko, Hazardous and Solid Waste Division, reported on SB 66 -- the vehicle for recycling legislation. SB 66 incorporates SB 163 and adds 80 sections which include market incentives, etc. Mr. Danko is working with a group consisting of 40-50 lobbyists and interested persons to develop a compromise on the legislation. With respect to goals and standards, Mr. Danko indicated that a menu approach was being developed. Items on the menu would include weekly collection, containers, education, rates, etc. Cities over 10,000 would have to select and do four menu items. Cities under 10,000 would have to do three. Goals would be established for each county. If the goals were not met, the jurisdictions within the county would have to do two more items from the menu. Mr. Danko reported that the bill also contains minimum contents (newspaper, glass, plastics, etc.), strong procurement provisions for state and local governments, and market development provisions.

Mr. Danko advised that the participants are divided into several work groups and are being pushed to make recommendations immediately for incorporation into a revised bill.

Chair Hutchison asked when the Department would be before Ways and Means. Mr. Loewy reported that it will be sometime in May. The Ways and Means process is moving very

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slowly while the committee reviews and requests justification for every line item. Mr. Loewy further reported that bills are moving slowly at present. Any bill with a fiscal impact on local government is being referred to the Rules Committee. The Department asbestos bill was referred to them. Local governments are opposing any legislation that imposes a cost upon them.

Mr. Loewy reported that the Oregon Bankers Association was sponsoring a bill to amend existing statutes to reduce hazardous waste related liability for lenders and trustees. Also, Rich Reiter is meeting with others to develop proposals for dealing with underground tank program concerns, particularly focusing on the rural parts of the state. This may take the form of increased grants and loan guarantees funded by an increased petroleum load fee, and could be linked to issues involving card-locks and self-serve.

Chair Hutchison advised that he had a potential conflict with the July meeting time as currently scheduled. Harold Sawyer noted that a memo had been forwarded to Commission members regarding July and September meeting proposals, and asking Commission members to bring their calendars to the April meeting.

There was no further business, and the meeting was adjourned at about 8:35 a.m.

Approved \_\_\_\_\_  
Approved with corrections \_\_\_\_\_  
Corrections made \_\_\_\_\_

MINUTES ARE NOT FINAL UNTIL APPROVED BY THE EOC

## ENVIRONMENTAL QUALITY COMMISSION

Minutes of the Special Phone Conference Update on Legislation  
April 9, 1991

The Environmental Quality Commission legislative update telephone conference meeting was convened at about 8:00 a.m. on Tuesday, April 9, 1991. Participating in the conference call were Chair Bill Hutchison, Vice Chair Emery Castle, Commissioners Bill Wessinger and Carol Whipple, and John Loewy and Harold Sawyer of the Department staff. The public could participate by speaker phone in Conference Room 3b of the Department of Environmental Quality Offices at 811 S. W. 6th Avenue in Portland, Oregon. No members of the public were present. Commissioner Lorenzen joined the conference call during the discussion.

John Loewy reported that SB 184, the Department's enforcement bill, had passed the Senate and had received a hearing in the House. No opposition has been raised to the bill. The Department's Asbestos bill passed the Senate Agriculture and Natural Resources Committee and is before the Senate Rules Committee for review of local government impacts. Chem Waste, Inc. has indicated it would not oppose a phased in fee increase for waste going to Arlington. The aluminum industry is opposed however. There is general industrial resistance to fee increases in general. The air fee bill is still on hold, and the waste tire bill and lab certification bill are still in the House Energy and Environment Committee.

Mr. Loewy indicated that a hearing and work session had been held on SB 330. This bill would add a fee for TMDL related work and §401 Certification. Another work session is scheduled. Lydia Taylor has been meeting with interested groups to gain understanding and support for the proposal. There appears to be some progress with the Association of Oregon Sewerage Agencies (AOSA) but little movement with agriculture and industry.

Commissioner Castle asked about a bill that would establish a Director of Natural Resources position. The bill would apparently change the title and status of the Governor's Assistant for Natural Resources. Mr. Loewy responded that there are a number of "structural" bills that have not yet been scheduled for hearing. One would merge the Health Division and DEQ. The House Committee on Reorganization may take up these bills, however, it is doubtful that they will receive more than discussion this session.

Steve Greenwood, Administrator of the Air Quality Division, reported on a proposal by Representative Burton to enact a fee to support the noise program. The bill initially proposed a race car lap fee, but that has been modified to a permit fee. The Department presented technical testimony on the bill. The Department has also advised the Governor's

EQC Telephone Conference Minutes

April 9, 1991

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office of public concerns on noise issues. The Governor's office has expressed concern about the concept of an industrial fee for noise.

Chair Hutchison asked what the Department was doing to leave a viable noise program. Mr. Greenwood indicated that a letter has been sent to local governments advising that the Governor has not recommended funding for continuation of a noise program, and that local governments will have the option to go beyond their current land use efforts if they wish a greater effort in noise. The Department would expect to continue to provide training and equipment upon request of local governments.

Chair Hutchison asked about the schedule for Ways and Means. Mr. Loewy responded that the sub-committee was about three weeks behind schedule at this point, and the Department's budget would not be up before the end of April or the first of May. Other budgets before the sub-committee include the Department of Land Conservation and Development (DLCD).

Commissioner Castle asked if there was anything regarding DLCD that would impact DEQ. Mr. Loewy indicated that he would have Roberta Young brief the Commission next week on land use issues that the Department is tracking.

The telephone conference was adjourned at about 8:20 a.m.

Oregon

Air

Quality



CRITERIA AIR POLLUTANTS

Particulate Matter

Sulfur Dioxide

Carbon Monoxide

Ozone

Nitrogen Dioxide

Lead

NEW EMISSION STANDARDS FOR

HAZARDOUS AIR POLLUTANTS (NESHAPS)

Asbestos

Beryllium

Mercury

Radon

Benzene\*

Vinyl Chloride\*

Radio Nuclides\*

\*No applicable sources in Oregon

# *Key Features of The New Clean Air Act*

## ***Nonattainment*** ■

A new round of State Implementation Plans — Tightened controls to achieve a 15% reduction in total VOC emissions by November 15, 1996, and demonstration of compliance by specified deadlines.

Federal Implementation Plans and other sanctions if states fail to meet SIP obligations.

Tightened controls on existing industrial plants, and more plants subject to such controls — EPA to issue Control Technique Guidelines for many more industrial categories.

Tougher restrictions on new plants and expansions.

Transportation plans must conform with SIPs; new efforts to restrict vehicle miles travelled and to improve Inspection and Maintenance of autos.

## ***Motor Vehicles and Clean Fuels*** ■

New rounds of tightened tailpipe emission standards.

Requirements to produce clean alternative fuels — methanol, ethanol, reformulated gasoline.

Fleet vehicle program to require use of clean fuels in many nonattainment areas.

On-board vapor recovery and evaporative emission controls.

## ***Air Toxics*** ■

189 designated substances to be regulated.

Maximum Achievable Control Technology (MACT) regulations for specific industrial categories.

Incentives for early achievement of 90% reductions.

Residual risk requirements can mandate further controls.

Accidental releases — new requirements for planning and preparedness.

## ***Acid Rain*** ■

Controls designed to dramatically cut acid rain precursors — 10 million ton reduction in SO<sub>2</sub> emissions and 2 million ton reduction in NO<sub>x</sub>.

Phase I controls for 111 coal-fired power plants beginning 1995.

Phase II controls on most power plants effective beginning 2000.

Market mechanisms allow trading in control credits to promote cost effectiveness.

## ***Permits*** ■

New federally-required air permits for emission sources.

States to develop approved permit programs. Permit terms will specify emission limitations, schedules for compliance, monitoring, and reporting.

Permit fees payable annually of at least \$25 per ton of emissions.

## ***Enforcement*** ■

EPA authorized to impose administrative penalties up to \$25,000 per day.

EPA investigators authorized to issue field citations with penalties up to \$5,000 per day.

Criminal felony sanctions for knowing violations, with fines up to \$250,000 per day, plus imprisonment.

Fines for knowing endangerment up to \$1 million per day.

NON ATTAINMENT AREAS

<u>CARBON MONOXIDE</u>	<u>ACT ATTAINMENT DATE</u>	<u>SIGNIFICANT SOURCES</u>
Portland-Vancouver	December 1995	Motor Vehicle
Salem	December 1995	Motor Vehicle
Grants Pass	December 1995	Motor Vehicle
Medford Area	December 1995	Motor Vehicle
Klamath Falls Area	December 1995	Motor Vehicle & Wood Stoves
 <u>OZONE</u>		
Portland-Vancouver Metro Area	December 1993	Motor Vehicle & Industry
Salem	December 1993	Motor Vehicle, Industry, & Impact from Portland Area
 <u>PM<sub>10</sub></u>		
Eugene-Springfield	December 1994	Wood Stoves & Industry
Grants Pass	December 1994	Wood Stoves & Industry
Medford Area	December 1994	Wood Stoves, Industry, & Slash Burning
Klamath Falls Area	December 1994	Wood Stoves
Oakridge	December 1994	Wood Stoves
LaGrande	December 1994	Wood Stoves, Industry, Road Dust, & Slash Burning

Table 3

**Number of Days Exceeding Standards for Selected Cities  
1984 through 1989**

CITY	1984	1985	1986	1987	1988	1989	1990
<b>Fine Particulate (PM10)</b>							
Bend	0	1	0	1	0	0	0
Eugene/Springfield	na	12	1	2	0	0	0
Grants Pass	na	na	na	3	0	0	0
Klamath Falls	na	na	na	<u>22</u>	<u>28</u>	<u>45</u>	18
La Grande	na	na	<u>0</u>	<u>1</u>	5	2	1
Medford*	<u>5</u>	<u>13</u>	<u>2</u>	<u>5</u>	<u>7</u>	<u>6</u>	1
Pendleton	na	na	0	0	0	0	0
Portland*	0	0	1	0	0	0	0
White City	na	16	2	<u>2</u>	<u>1</u>	<u>2</u>	0
<b>Carbon Monoxide</b>							
Eugene/Springfield*	0	1	0	0	0	0	0
Grants Pass	9	10	2	4	2	1	1
Medford*	18	35	16	4	2	15	0
Portland*	2	1	1	1	1	2	0
Salem	0	4	0	0	0	0	0
<b>Ozone</b>							
Eugene/Springfield	0	0	0	0	1	0	0
Medford	0	0	0	0	0	0	0
Portland*	2	2	3	1	2	0	4
Salem	0	0	0	na	na	na	na

\* Denotes combined data from multiple sites in area

Underlined values indicate years of annual standard violations

na = Data not available

Figure 1

1990 Air Pollution Index Values Summary

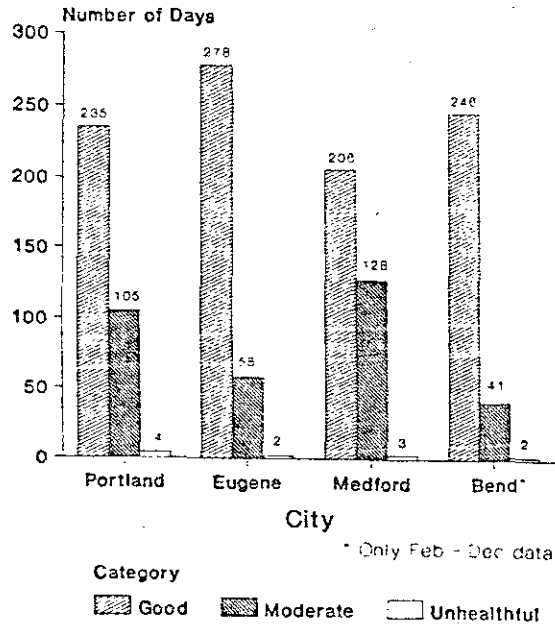


Figure 3

Ambient Particulate Trends in Selected Oregon Cities (Annual Arithmetic Mean)

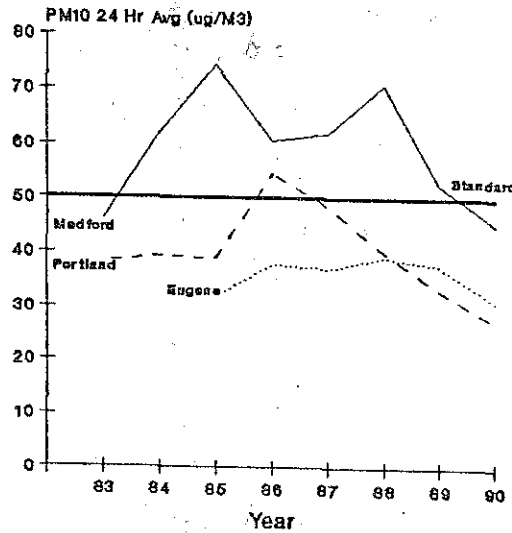


Figure 4

Ambient Ozone Trends in Selected Oregon Cities (Second Highest Day)

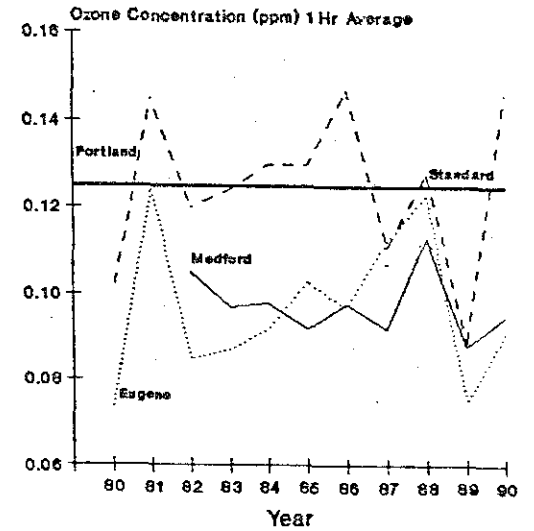


Figure 2

Ambient Particulate Trends in Selected Oregon Cities (Second Highest Day)

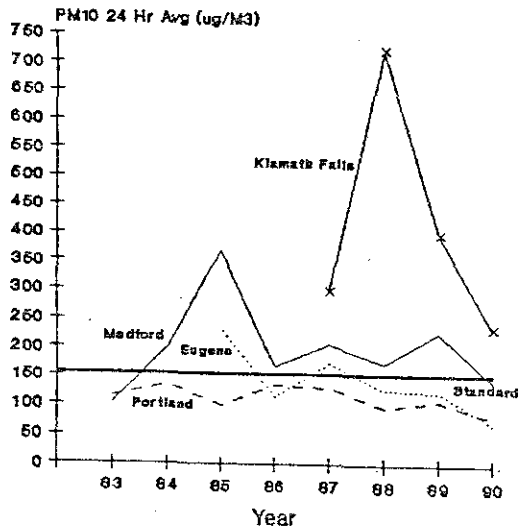


Figure 5

Ambient Carbon Monoxide Trend in Selected Oregon Cities (Second Highest Day)

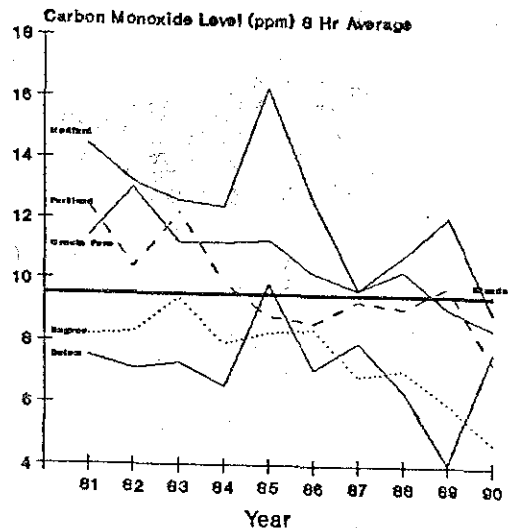
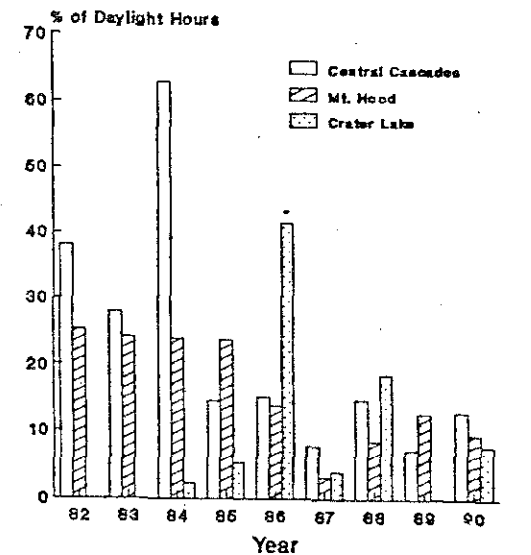
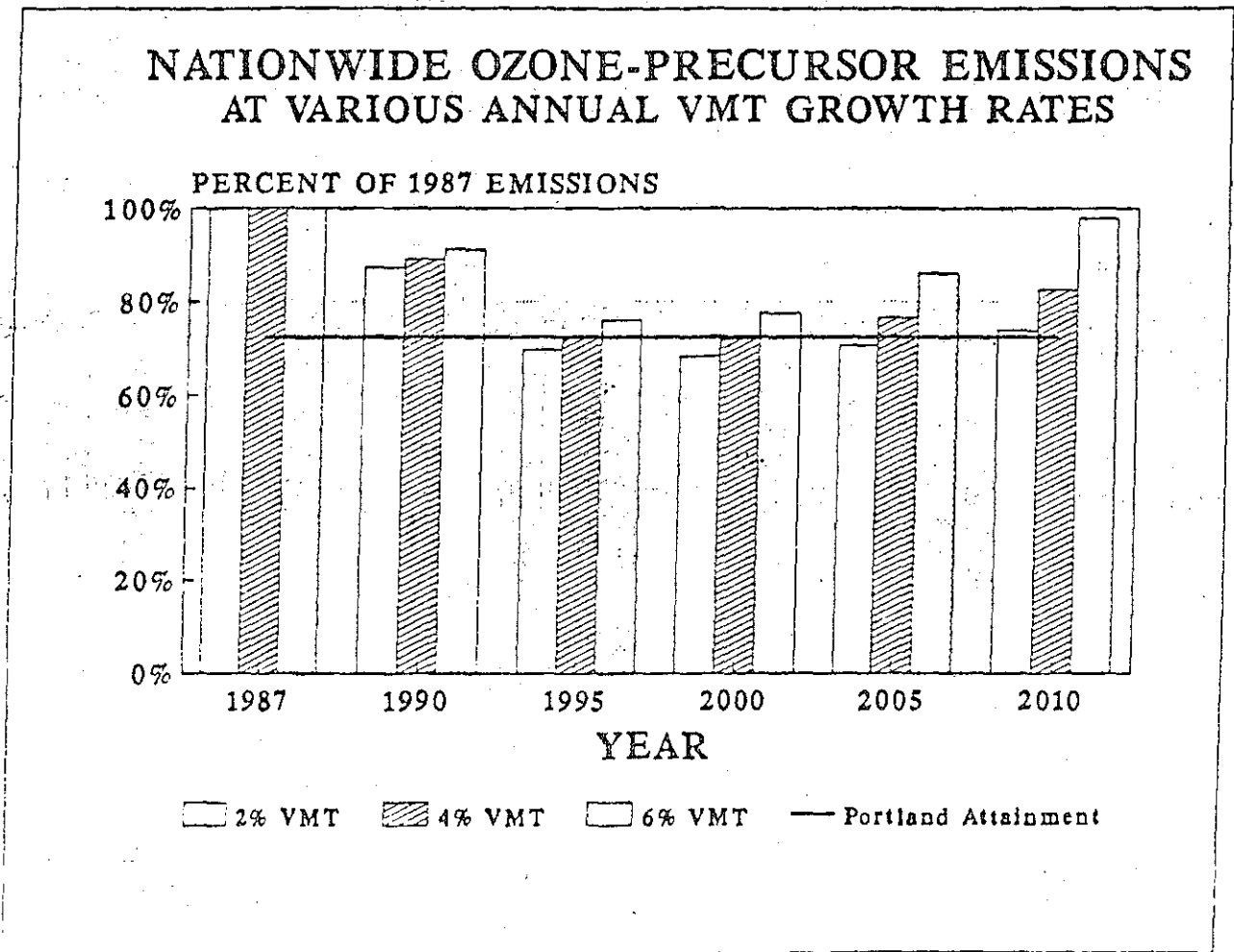


Figure 6

Visibility Impairment Frequency July 4 - Labor Day Period



GENERAL EMISSION PATTERN AT VARIOUS VMT GROWTH RATES



AIR QUALITY DIVISION

ADMINISTRATOR  
Greenwood, S.

DIVISION MANAGEMENT ASSISTANT  
Joy, L.

REGIONAL OPERATIONS DIVISION

Tom Bisphan, Administrator

- Permit drafting
- Compliance inspection
- Complaint response
- Enforcement
- Technical assistance

LABORATORY

Al Hose, Administrator

- Collection/analysis of air samples
- Quality assurance of data
- Asbestos sample analysis
- Special projects

PROGRAM PLANNING AND DEVELOPMENT

PLANNING & DEVELOPMENT MANAGER  
Kowalczyk, J.F.

- Control strategy development
- Visibility protection programs
- Woodstove certification
- Source control rules
- Toxic air pollutants
- EPA coordination
- Transportation strategies and source control

PROGRAM OPERATIONS

AQ PROGRAM OPERATIONS MANAGER  
Sims, W.L.

- Permitting
- Stationary source compliance
- Plan review/tax credits
- Training and technical assistance
- Source compliance data base
- EPA coordination

NOISE POLLUTION CONTROL

NOISE POLLUTION MANAGER  
Obtshka, T.L.

- Motor racing facilities/events
- Motor vehicle certification
- Air parks
- Source compliance
- Local program assistance

FIELD BURNING / WOODSTOVES

FIELD BURNING/WOODSTOVE MGR.  
Crane, S.

- Enforcement
- Coordination with Dept. of Ag.

ASBESTOS CONTROL

ASBESTOS CONTROL MANAGER  
Armitage, S.

- Compliance
- Enforcement
- Worker certification
- Contractor licensing
- Technical assistance

VEHICLE INSPECTION

VEHICLE INSPECTION MANAGER  
Householder, R.C.

- Inspection station operation
- Fleet inspections
- Customer assistance
- Technical analysis/support

TECHNICAL SERVICES

TECHNICAL SERVICES MANAGER  
Erickson, S.L.

- Emission modelling
- Source testing
- Emission inventory
- Meteorology
- Special projects
- Air monitoring systems & development

# COMPREHENSIVE AIR EMISSION FEE

Department of Environmental Quality

House Bill 2175

## THE NEED

Air pollution continues to be a problem in many areas of Oregon—a threat to public health and the environment which will increase with anticipated population and economic growth. Further tightening of the existing traditional regulatory controls will be difficult, especially for significant non-industrial sources of air pollution such as woodstoves and motor vehicles. New and innovative approaches to reducing air pollution are needed to augment current regulatory controls.

## THE PROPOSAL

House Bill 2175 addresses Oregon's present and future air quality problems through a non-regulatory, market-based incentive program. It would establish a comprehensive air pollution emission fee on contaminants from industry, residential wood heating, motor vehicles, forest slash burning and agricultural field burning. Revenue from the fees would be used to develop and lower the cost of less-polluting alternatives.

This comprehensive Emission Fee Program has the potential to reduce air pollution statewide by up to 40 percent within 5-10 years. At the same time, it would conserve energy and encourage orderly growth and development.

## THE HIGHLIGHTS

The Emission Fee Program authorizes application of a \$25 per ton fee for air pollution from industry. The federal Clean Air Act of 1990 requires states to implement such a fee on industrial emissions. HB 2175 extends the fee concept to emissions from all other major sources of air pollution in Oregon.

HB 2175 does not specify the amount of the fee to be applied to each source. It requires the Environmental Quality Commission to develop fee schedules based on the amount of emissions produced and the potential environmental impact involved.

Both emission fees and revenues from those fees provide an incentive to reduce air pollution. Emission fees make the polluting activities more expensive, while fee revenues will be used to make alternative, less-polluting activities more available and affordable. People can decide for themselves whether to pay the fees or switch to less-polluting activities.

The table (see other side) shows the major sources of air pollution in Oregon and the percentage of statewide emissions each source produces. The approximate fees shown and projected revenue are based on average emission rates.



Source Category	% of Statewide Emissions*	Approx. Fee (\$25/ton basis)	Total Annual Revenue
Motor Vehicles	36.1%	\$ 3 per vehicle yearly**	\$7.8 million
Forest Slash Burning	18.0%	\$16 per acre burned	\$3.6 "
Woodstoves	11.6%	\$ 3 per cord sold	\$3.3 "
Industry	5.7%	\$25 per ton emitted	\$2.7 "
Field Burning	2.4%	\$ 4 per acre burned	\$0.9 "

\*The remaining 26.2% of emissions are from a wide variety of smaller sources (for example, windblown dust), for which emission fees cannot be readily collected.

\*\*The fee on motor-vehicle emissions would be statewide. A supplemental fee is proposed for areas which violate ozone pollution standards (Portland only, at the present time). The supplemental fee is needed to change driving habits and fund needed transit programs in major urban areas.


Eighty percent of the fees collected from a source category would be dedicated to funding air quality improvement programs for that category. The remaining fees would be pooled to fund the highest priority projects.

Examples of projects that may be funded include improvements in mass transit, development of alternative fuel supplies and vehicle conversions, subsidies of power-plant construction and operation to burn forest slash and grass-straw residue, subsidies for weatherization and upgrading of traditional residential wood-heating systems, and financial assistance to local governments to operate wood-heating emissions reduction programs.

Air quality improvement projects would be selected for funding by the Environmental Quality Commission based on recommendations from an advisory board composed of inter-agency representatives and the general public.

The Emission Fee Program would be evaluated every two years by DEQ on its effectiveness in reducing emissions and by the Executive Department on its overall effectiveness in meeting program objectives.

TO: Environmental Quality Commission

FROM: Fred Hansen 

SUBJECT: Agenda Item 2, April 25, 1991 Work Session  
Oregon's Recycling System and Charging for  
Recycling Collection

A) OREGON'S OPPORTUNITY TO RECYCLE ACT

Background: Statutes and Rules

The Oregon Opportunity to Recycle Act was passed by the legislature in 1983 and took effect in 1986. It was the first statewide recycling legislation to pass in the United States and became the model from which other states developed their programs. The major components of the legislation included:

- establishment of a solid waste management hierarchy (reduce, reuse, recycle, recover energy, landfill);
- establishment of minimum recycling service standards (at least monthly on-route collection of recyclable materials from collection service customers in cities with a population of 4,000 or more, recycling depots at disposal sites or a more convenient location, and an education and promotion program);
- provision for rules to be adopted regarding waste disposal and recycling, including the identification of wastesheds and of principal recyclable materials;
- definitions, including a definition for recyclable material;



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- placement of a limit on the amount an individual can be charged for recycling service;
- prohibition on the mixing of source separated recyclable material with solid waste; and
- establishment of reporting requirements.

The Commission adopted rules in 1985 which clarified certain areas of the statute. Included in the rules were the following items:

- identification of wastesheds;
- identification of principal recyclable materials for each wasteshed;
- criteria for acceptable alternative methods for providing the opportunity to recycle;
- criteria for education, promotion and notification;
- standards for recycling reports;
- conditions under which materials or collection programs would be exempt from regulation; and
- conditions under which source separated material may be mixed with solid waste.

There has been little change in the rules since 1985. Major changes since that time have included addition of: yard debris as a principal recyclable material for the Portland area wastesheds; specific requirements for yard debris plans where yard debris is a principal recyclable material; requirements for recycling certification and approval of waste reduction programs required for disposal of waste at certain disposal facilities in the state.

Implementation:

The statute required that programs under the Opportunity to Recycle Act had to be implemented by 1986. The Department identified through rule the wastesheds in the state. A wasteshed is defined as an area of the state having a common solid waste disposal system or designated by the Commission as an appropriate area of the state within which to develop a common recycling program. For the most part, the wastesheds in the state correspond to county geographic boundaries although some cities are their own wasteshed. The Department

also identified through rule the principal (or candidate) recyclable materials for each of the wastesheds. These materials were identified for each wasteshed based on whether they were currently being collected, the distance from markets, the population density, and the proximity to major transportation routes. As programs came on line, wastesheds asked the Department for further clarification of what materials had to be collected in the wasteshed. Although the law does not require the Department to identify materials that must be collected, the Department responded to the wastesheds' request by identifying the materials which the Department believed met the definition of recyclable material for each site where the opportunity to recycle had to be provided. These lists were sent to the wastesheds as further guidance in determining what should be recycled in each wasteshed. These were suggested lists only. Most jurisdictions interpreted these lists, however, as the materials which they were required to recycle at each site.

Each local jurisdiction implemented their program a little differently based on the resources available to them. Some jurisdictions passed the responsibility of implementing the program on to the local solid waste collection and disposal franchise holders and invested little or no time or resources in implementing the programs. Other jurisdictions required that the solid waste collection franchise holder implement the recycling collection requirements and some of the education and promotion. The local jurisdiction then supplemented those recycling programs with additional programs of their own. In most cases, the cities or counties which implemented programs in the latter manner exceeded the minimum requirements of the Opportunity to Recycle Act.

Recycling collection is provided by refuse collection companies or recycling contractors to all collection service customers in cities of 4,000 or more. Since 1986, the Department has placed primary emphasis on ensuring that recycling collection is provided to residential customers; the Department has not emphasized implementation of recycling opportunities for commercial establishments or multi-family dwellings. All on-route recycling programs in Oregon currently require that recyclable materials be source separated from mixed solid waste, although the degree of required separation by material type can vary. Furthermore, it is unlawful to dispose of source separated material through any means other than reuse or recycling. Materials collected by local programs are then delivered to end-use markets who usually pay for the material or to brokers who usually either pay for the material or accept the material

for free. On occasion, brokers and end-use manufacturers will charge to accept certain materials.

Oregon has end-use markets for ferrous metal, used oil, container glass, newsprint, and corrugated cardboard. Other end-use markets for tin cans, newsprint, and corrugated cardboard are located in the Pacific Northwest. Oregon also has a network of brokers that handle recyclable materials such as ferrous and non-ferrous metals, numerous grades of paper, container glass, tin cans, plastics, and window glass. This network of brokers is located primarily in the Willamette Valley, and so is not as accessible to programs in Central and Eastern Oregon. As a result, Central and Eastern Oregon programs must market their material primarily to end-use markets.

The sale of recyclable material only covers a fraction of the cost of providing on-route residential recycling service. The Oregon Sanitary Services Institute (OSSI) and the Association of Oregon Recyclers (AOR) undertook a study in 1989 to determine the gross and net costs of providing on-route residential recycling service. They collected data from four recycling programs over a three month period of time and found that the sale of recyclable material covered only six to fourteen percent of the total monthly cost to run the program. Most residential on-route recycling collection programs in Oregon, therefore, are funded through garbage collection rates, where the cost of providing the recycling service is spread across the garbage collection customer base and incorporated into the rate for garbage collection. The Department conducted an informal survey of commercial recycling collection programs and found that some programs spread the cost of services over the commercial garbage collection customer base while others charge for recycling services or for rental of the recycling container.

The Department has received requests from the City of Portland and the Metropolitan Services District (Metro) to interpret that section of the statute, ORS 459.190 (see Attachment A), which limits the amount a person who source separates recyclable material can be charged. In particular, the City of Portland and Metro were interested in how this would be interpreted for residential yard debris recycling programs, commercial collection and collection from multi-family dwellings. Some local programs would like to charge a fee to customers participating in recycling programs such as the ones mentioned above in order to pay for the program. Their request is based on the premise that it is unfair to charge all garbage service customers for the cost of the program since only specific types of waste generators use

those particular programs. These requests indicate that service providers and local governments are taking a new look at the recycling costs incurred for their programs and how the costs might best be incorporated into the rate system.

B) ISSUES

As indicated by the more complicated policy issues which are beginning to arise, recycling has developed far beyond the grassroots efforts of the early 1970s. The public now understands the need for recycling and is beginning to expect it as part of society's basic waste management efforts. Local governments, in return, are attempting to balance public demand for recycling programs with development of efficient, cost effective collection systems. In addition, recycling is becoming a growth industry within the private sector. The collection, marketing, and processing of recyclable material is beginning to be viewed less as a public service and more as a business enterprise or an integrated part of any waste management business. In light of these changes, it is important to evaluate the current recycling programs in two areas: how to determine which materials are collected and how to pay for the collection of those materials. These two issues are closely tied to the definition of recyclable material in current state law.

Recyclable material is defined in ORS 459.005 as "any material or group of materials that can be collected and sold for recycling at a net cost equal to or less than the cost of collection and disposal of the same material." The Department has identified the following as issues which need to be addressed when developing policy regarding materials to be recycled and any fees which might be allowed for recycling services.

- The current definition of recyclable material evaluates materials based on economics alone and does not consider other factors such as environmental hazards posed by the material, the volume of material in the wastestream, public demand to recycle a material, stability of markets, or continuity of recycling programs.
- The Department has limited data on the costs of collection and disposal and costs of collection and recycling for programs required under state law. It is, therefore, difficult to apply the economic test described in the definition of "recyclable material", especially when considering whether or not to add or delete materials from the principal recyclable materials lists.

- With limited cost data, it is difficult for the Department to assess whether allowing a charge for recycling service of principal recyclable materials causes a group of materials to no longer meet the definition of recyclable materials.
- It is not clear to local programs that, under current law, they can collect material not on the principal recyclable materials lists and charge for that collection to cover costs.
- If local programs are allowed to implement a charge for the collection of specific principal recyclable materials, the system for charging could create a disincentive for source separating and recycling these materials because the costs would be born only by those recycling the materials. Even though the charge, by law, would have to be less than the charge for collection of that same material as solid waste, it may be high enough to discourage people from recycling that material.

C. ALTERNATIVES

Some of the possibilities open for discussion are:

1. No change to the current approach. (i.e. difficult to add materials to principal recyclable materials lists, cost of recycling service incorporated into the garbage rate, the Department would need to develop criteria to evaluate whether a fee could be charged for recycling service on a case-by-case basis)
2. Maintain the statutory definition of "recyclable material", including the economic test and the regulatory definition for the list of "principal recyclable materials". Develop rules which define the parameters under which local programs could charge for collection of materials on the list and additional materials not on the list through one or more of the following options:
  - Incorporate the cost of collection of materials into the overall garbage rate for all garbage collection customers.

- Charge a fee for recycling collection service and a separate fee for garbage collection service to all garbage collection service customers.
  - Charge only those recycling participants for the cost of recycling collection service.
3. Maintain the statutory definition of "recyclable material". Broaden the definition of "principal recyclable material" to include materials which may be collected based on public demand, distance to markets, environmental impact, volume in the wastestream, proximity to major transportation routes, conservation of natural resources and market demand. Develop rules which define parameters under which local programs could charge for collection of all materials through one or more of the options outlined in alternative 2.
  4. Seek statutory change to the definition of recyclable material which would eliminate or broaden the economic test to include the criteria listed in alternative 3 above.
  5. Seek statutory change that would ban materials from landfilling or incineration and place no parameters on how local programs can charge for the collection of the banned materials.

The Commission or workgroup may wish to propose alternatives other than those suggested above that would more effectively address the questions regarding which materials should be collected and how the cost of collection should be covered.

D. RECOMMENDED NEXT STEPS

1. Form a work group to explore the issues and alternatives.
2. Conduct a voluntary survey to collect economic data on the cost of recycling and cost of disposal for single materials and groups of materials. This survey would accomplish two things. First, the Department could determine if it is feasible to collect the necessary economic data using a voluntary approach. Second, the economic data would allow the Department to more adequately analyze whether or not materials do in fact meet the definition of "recyclable material".



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Agenda Item: 2  
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3. Conduct a survey of the public at large to obtain feedback from the public regarding their views on what constitutes disincentives and incentives for recycling in today's society. This information would help the Department develop informed recommendations on rate structures that would continue to meet the intent of ORS 459.190 and yet address the need to accommodate the cost of collecting materials for recycling.

The above suggestions are ideas on how the Department might proceed to address these issues. The Department welcomes any other suggestions the Commission may have regarding the next steps that should be considered, or whether anything further needs to be done.

Prepared by: Lissa West  
Phone: 229-6823  
Date: April 9, 1991

Approved:

Section: \_\_\_\_\_  
Division: Stephanie Hallock

Whitworth:b  
G:\RECY\YB10436 (4/9/91)

(b) The mandatory participation program is economically feasible within the affected watershed or portion of the watershed; and

(c) The mandatory participation program is the only practical alternative to carry out the purposes of ORS 459.015.

(4) After a mandatory participation program is established for a class of generators of solid waste, no person within the identified class of generators shall put solid waste out to be collected nor dispose of solid waste at a disposal site unless the person has separated the identified recyclable material according to the requirements of the mandatory participation program and made the recyclable material available for recycling. (1983 c.729 §8)

**459.190 Limitation on amount charged person who source separates recyclable material.** A collection service or disposal site may charge a person who source separates recyclable material and makes it available for reuse or recycling less, but not more, for collection and disposal of solid waste and collection of recyclable material than the collection service charges a person who does not source separate recyclable material. (1983 c.729 §11)

**459.192 Exemptions.** Nothing in ORS 459.005, 459.015, 459.035, 459.165 to 459.200, 459.250, 459.992 and 459.995 applies to recyclable material which is:

(1) Source separated by the generator; and

(2) Purchased from or exchanged by the generator for fair market value for recycling or reuse. (1983 c.729 §12)

**459.195 Prohibitions against removing or mixing recyclable material.** A person may not:

(1) Without the permission of the owner or generator of recyclable material, take recyclable material set out to be collected by a person authorized by a city or county to provide collection service for that recyclable material.

(2) Remove any recyclable material from a container, box, collection vehicle, depot or other receptacle for the accumulation or storage of recyclable material without permission of the owner of the receptacle.

(3) Mix source separated recyclable material with solid waste in any vehicle, box, container or receptacle used in solid waste collection or disposal. (1983 c.729 §13)

**459.200 City, county authority to issue collection service franchises; opportunity to recycle; rates.** (1) The Legislative Assembly finds that providing for collection service including but not limited to the col-

lection of recyclable material as part of the opportunity to recycle is a matter of statewide concern.

(2) The exercise of the authority granted by this section is subject to ORS 221.735 and 459.085 (3).

(3) It is the intent of the Legislative Assembly that a city or county may displace competition with a system of regulated collection service by issuing franchises which may be exclusive if service areas are allocated. The city or county may recognize an existing collection service. A city or county may award or renew a franchise for collection service with or without bids or requests for proposals.

(4) In carrying out the authority granted by this section, a city or county acts for and on behalf of the State of Oregon to carry out:

(a) The purposes of ORS 459.015;

(b) The requirements of ORS 459.005, 459.015, 459.035, 459.165 to 459.200, 459.250, 459.992 and 459.995;

(c) Waste reduction programs; and

(d) The state solid waste management plan.

(5) After October 15, 1983, a city or a county may continue, extend or renew an existing franchise or grant a new franchise for collection service. If a city or county, in furtherance of ORS 459.005 to 459.426, has granted a collection service franchise before October 15, 1983, it may treat the franchise as if adopted under this section.

(6)(a) If a collection service franchise is continued, extended, renewed or granted on or after October 15, 1983, the opportunity to recycle shall be provided to a franchise holder's customers no later than July 1, 1986. This subsection does not apply to that portion of the opportunity to recycle provided at or in connection with a disposal site under ORS 459.250.

(b) The opportunity to recycle may be provided by:

(A) The person holding the franchise;

(B) Another person who provides the opportunity to recycle to the franchise holder's customers; or

(C) A person who is granted a separate franchise from the city or county solely for the purpose of providing the opportunity to recycle.

(c) In determining who shall provide the opportunity to recycle, a city or county shall first give due consideration to any person lawfully providing recycling or collection service on June 1, 1983, if the person continues to provide the service until the date the determination is made and the person

has not discontinued the service for a period of 90 days or more between June 1, 1983, and the date the city or county makes the determination.

(7) In granting a collection service franchise, the city or county may:

(a) Prescribe the quality and character of and rates for collection service and the minimum requirements to guarantee maintenance of service, determine level of service, select persons to provide collection service and establish a system to pay for collection service.

(b) Divide the regulated area into service areas, grant franchises to persons for collection service within the service areas and collect fees from persons holding such franchises.

(8) The rates established under this section shall be just and reasonable and adequate to provide necessary collection service. The rates established by the city or county shall allow the person holding the franchise to recover any additional costs of providing the opportunity to recycle at the minimum level required by ORS 459.005, 459.015, 459.035, 459.165 to 459.200, 459.250, 459.992 and 459.995 or at a higher level of recycling required by or permitted by the city or county. The rates shall also allow the person to recover the costs of education, promotion and notice of the opportunity to recycle provided by a person holding a franchise.

(9) Instead of providing funding for the opportunity to recycle through rates established pursuant to subsection (8) of this section, a city or county may provide an alternative method of funding all or part of the opportunity to recycle.

(10) In establishing service areas, the city or county shall consider:

(a) The policies contained in ORS 459.015;

(b) The requirements of ORS 459.165 to 459.200 and 459.250;

(c) Any applicable local or regional solid waste management plan approved by the department;

(d) Any applicable waste reduction plan approved by the department; and

(e) The need to conserve energy, increase efficiency, provide the opportunity to recycle, reduce truck traffic and improve safety.

(11) A city or county may further restrict competition by permitting one or more collection service franchise holders to cooperate to provide the opportunity to recycle if the city or county finds that such cooperation will:

(a) Improve collection service efficiency;

(b) Guarantee an adequate volume of material to improve the feasibility and effectiveness of recycling;

(c) Increase the stability of recycling markets; or

(d) Encourage joint marketing of materials or joint education and promotion efforts.

(12) The provisions of this section are in addition to and not in lieu of any other authority granted to a city or county. A city or county's exercise of authority under this section is not intended to create any presumption regarding an activity of the local government unit not addressed in this section. This section shall not be construed to mean that it is the policy of Oregon that other local government activities may not be exercised in a manner that supplants or limits economic competition. (1983 c.729 §10)

#### (Disposal Sites)

**459.205 Permit required.** (1) Except as provided by ORS 459.215, a disposal site shall not be established, operated, maintained or substantially altered, expanded or improved, and a change shall not be made in the method or type of disposal at a disposal site, until the person owning or controlling the disposal site obtains a permit therefor from the department as provided in ORS 459.235.

(2) The person who holds or last held the permit issued under subsection (1) of this section, or, if that person fails to comply, then the person owning or controlling a land disposal site that is closed and no longer receiving solid waste after January 1, 1980, must continue or renew the permit required under subsection (1) of this section after the site is closed for the duration of the period in which the department continues to actively supervise the site, even though solid waste is no longer received at the site. (1971 c.648 §6; 1983 c.766 §7)

459.210 (1969 c.90 §2; repealed by 1971 c.648 §33)

**459.215 Exclusion of certain sites from permit requirement.** (1) By rule and after public hearing, the commission may prescribe criteria and conditions for excluding classes of disposal sites from the permit requirements of ORS 459.205. Disposal sites so excluded shall be limited to those which, because of the nature or volume of solid waste handled, are not likely to create a public nuisance, health hazard, air or water pollution, or other serious problem. Facilities operated under a permit issued under ORS 468.740 are not required to obtain a permit from the department pursuant to ORS 459.205. However, exclusion from the permit requirements of ORS 459.205 does not relieve any person from compliance with other requirements of ORS 459.005 to 459.105, 459.205

WORK SESSION  
REQUEST FOR EQC DISCUSSION

Meeting Date: April 25, 1991  
Agenda Item: 3  
Division: Water Quality  
Section: Standards & Assessment

**SUBJECT:**

Report on the Status of the Triennial Review of Water Quality Standards and Identification of Policy Issues Associated with Several of the Standards Proposals Based on Public Comment

**PURPOSE:**

The purpose of this report is to review with the Environmental Quality Commission (Commission):

1. Status of the triennial review of Water Quality Standards,
2. Major concerns raised in hearings and during the public comment period on proposed revisions to the Antidegradation and Toxic Pollutants, and
3. Significant policy issues associated with the proposed standards that will need to be addressed by the Commission when taking action on proposed standards in June 1991.

**ACTION REQUESTED:**

- Work Session Discussion  
 General Program Background  
 Potential Strategy, Policy, or Rules  
 Agenda Item \_\_\_ for Current Meeting  
 Other: (specify)



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Meeting Date: April 25, 1991  
Agenda Item: 3  
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<input type="checkbox"/>	Authorize Rulemaking Hearing	
<input type="checkbox"/>	Adopt Rules	
	Proposed Rules	Attachment <input type="checkbox"/>
	Rulemaking Statements	Attachment <input type="checkbox"/>
	Fiscal and Economic Impact Statement	Attachment <input type="checkbox"/>
	Public Notice	Attachment <input type="checkbox"/>
<input type="checkbox"/>	Issue a Contested Case Order	
<input type="checkbox"/>	Approve a Stipulated Order	
<input type="checkbox"/>	Enter an Order	
	Proposed Order	Attachment <input type="checkbox"/>
<input type="checkbox"/>	Approve Department Recommendation	
	Variance Request	Attachment <input type="checkbox"/>
	Exception to Rule	Attachment <input type="checkbox"/>
	Informational Report	Attachment <input type="checkbox"/>
	Other: (specify)	Attachment <input type="checkbox"/>

**DESCRIPTION OF REQUESTED ACTION:**

This is an informational report and no formal action is requested. The Department is nearing the final stage of completing its triennial review of water quality standards and will be recommending rule language for consideration by the Commission in June 1991.

The Department staff wishes to acquaint the Commission with concerns received during the public comment period on two water quality standards proposals. As part of the staff review of the testimony some key policy issues have been identified and the following report will highlight some of these issues.

**Status of Triennial Review Process**

Every three years the Department reviews water quality standards in fulfillment of the Clean Water Act requirements to determine if revisions are needed to current rules to more fully protect water quality and beneficial uses. At the November 2, 1990 meeting, the Commission authorized proposed amendments to water quality standards be taken to rulemaking hearing. This action followed a series of steps including:

1. DEQ request for public review of the rules and to determine if the public was concerned about particular rules and to solicit suggestions as to which rules should be considered for revision.

2. Preparation of issue papers on 14 topics, discussion concerns with the rules and proposed rule concepts.
3. Public notice and distribution of the Issue Papers covering those 14 topics, and workshops to discuss existing standards and potential new and revised rule language.
4. Further public comment on the issue papers resulting in the Department narrowing its package of proposed standards revisions for hearing to eight rules.

A notice of public hearings was published in the Secretary of State's Bulletin on December 1, 1990 and sent to a mailing list of interested persons on January 4, 1991.

Eight hearings were held in January 1991. Several commenters requested the hearing record be held open beyond January 25, 1991. This was granted and a notice extending the comment period to March 1, 1991 was published and distributed to the mailing list of interested persons.

#### **Public Comment on Several of the Standards Proposals**

This early presentation of some of the public comment associated with selected standards proposals, specifically: the Antidegradation Policy, and Toxic Pollutants, is intended to provide the Commission an opportunity to consider some of the policy issues before the June 14, 1991 meeting.

The principle comments made on these standards proposals are:

##### **A. Antidegradation Policy**

- o Concerns about the burden of responsibility for nominating water bodies to an Outstanding Resource Water (ORW) category. Some testified that those who nominate waters to this category should bear the burden of gathering the information and developing the management plan to justify the designation of specific waters to this category. Others seriously questioned why it should be the public's responsibility to demonstrate why some specific waters deserve to be categorized as Outstanding Resource Waters (ORW). Instead the burden should be on those who wish to degrade any

water to show cause why the degradation should be allowed.

- o **Concerns that some waters such as federal and state Wild and Scenic Waters aren't automatically protected as ORWs.** Some testified that the federal antidegradation policy which references types of Outstanding Resource Waters (such as National Parks) legally requires the states to automatically include these waters as ORWs. Others commented that all waters should be considered outstanding resource waters and no degradation be allowed in any waters of the state.
- o **Concern that inclusion of waters in an Outstanding Resource Water category will pose economic hardships to communities and to individual landowners.** Some question whether it is reasonable to expect implementation of a "non-degradation" policy and question whether it is realistic for any waters to be assigned to this type of category.

**B. Toxic Pollutants - Proposed Freshwater Standards for Aluminum and Chloride; and maintain the Existing Standard for Dioxin.**

- o **Concerns about EPA's technical basis for the chloride and aluminum criteria and DEQ's use of EPA's criteria.** No analytical methods are known to be ideal to measure the toxic form of aluminum on which the toxicity data and EPA's criteria are based. The aluminum acute and chronic criteria are too stringent based on the literature cited in the EPA criteria document. EPA's methods for determining the acute and chronic toxicity values for chloride are seriously questioned. Use of the criteria as instream standards will be burdensome to Teledyne Wah Chang. No economically feasible method for removing chloride to the proposed levels exists.
- o **Concerns that a revision to the standard for 2,3,7,8 TCDD was not proposed for rulemaking hearing.** It was strongly suggested that the standard should be revised to take into account the latest scientific information. It was strongly suggested that the existing standard for dioxin be revised. No rule language for modifying the standard was taken to hearing.

Besides the topics above, the Department also received comment on the standards proposals for the following: Dissolved Oxygen; Toxic Pollutants in fish tissue, Wetlands as waters of the state, Bacteria Standard; Mixing Zone Policy; Biological Criteria; and Turbidity. The Department's summary and response to oral and written record of public comment will be included in the staff report prepared as part of the Department request for Commission action on the standards proposals.

**AUTHORITY/NEED FOR ACTION:**

- Required by Statute: \_\_\_\_\_ Attachment \_\_\_\_\_  
                  Enactment Date: \_\_\_\_\_  
 Statutory Authority: \_\_\_\_\_ Attachment \_\_\_\_\_  
 Pursuant to Rule: \_\_\_\_\_ Attachment \_\_\_\_\_  
 Pursuant to Federal Law/Rule: \_\_\_\_\_ Attachment \_\_\_\_\_  
  
 Other: \_\_\_\_\_ Attachment \_\_\_\_\_  
  
 Time Constraints: (explain)

**DEVELOPMENTAL BACKGROUND:**

- Advisory Committee Report/Recommendation Attachment \_\_\_\_\_  
 Hearing Officer's Report/Recommendations Attachment \_\_\_\_\_  
 Response to Testimony/Comments Attachment \_\_\_\_\_  
 Prior EQC Agenda Items: (list)

Item F: Authorization for Rulemaking Hearing:  
Proposed Amendments to Water Quality Standards as Part  
of the Triennial Review Required by the Clean Water Act,  
September 21, 1990

- Attachment \_\_\_\_\_  
 Other Related Reports/Rules/Statutes: Attachment \_\_\_\_\_  
 Supplemental Background Information Attachment \_\_\_\_\_  
  
Antidegradation Policy Issue Paper - Principle Comments  
and Issue Summary Attachment A  
  
Toxic Pollutants - Principle Comments and Issues Summary  
Attachment B

**REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:**

The regulated community subject to the water quality standards proposals includes private industrial and domestic



system dischargers, municipal wastewater treatment facilities, federal and state agricultural and forest land management agencies, cities, counties and individual citizens.

The Department received a wide range of comment from the regulated community, individuals and environmental interest groups. The Hearing Officers' Report and a Summary and Evaluation of Testimony will be completed and appended to the staff report requesting EQC action in June 1991. It will be mailed to those who have provided comment to date on the standards proposals and to others requesting it.

**PROGRAM CONSIDERATIONS:**

Some of the comments and detailed testimony express concern about the state's statutory authority to protect certain water environments. Also, some express concern about the technical/scientific basis for certain standards proposals. The Department considers it appropriate to acquaint the Commission with some of these issues prior to the June 14, 1991 Commission meeting.

**ALTERNATIVES CONSIDERED BY THE DEPARTMENT:**

This is not applicable since this is an informational item.

**DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:**

This is not applicable since this is an informational item.

**CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:**

This report is consistent with the Department's Strategic Plan, Agency Policy, and Legislative policy to bring matters of environmental policy to the Commission's attention and to identify public comments and concerns about proposed rules.

**ISSUES FOR COMMISSION TO RESOLVE:**

A number of policy issues and questions emerge from the public comment on aspects of the standards proposals. In some instances the questions would apply to standards issues in general, but they are placed under the standards proposal under which they predominantly were raised:

**Antidegradation:**

1. Overall, is antidegradation a water quality protection policy or a water quality degradation policy? Is the policy providing adequate protection from increased loads for high quality water or is it just a process for allowing sources to receive load increases?
2. Regarding the proposal to provide a process for nominating Outstanding Resource Waters and for implementing a "non-degradation" policy in these waters.
  - a) How aggressive will the Department and Commission be in establishing ORWs or will the burden for justifying inclusion of waters to the category fall on the nominator?
  - b) Should the proposed rule automatically designate the waters listed in the current rule, such as Wild and Scenic Rivers, State Parks, National Parks, and National Wildlife Refuges?
  - c) Should all waters of Oregon be protected as Outstanding Resource Waters?
  - d) Is a non-degradation policy a realistic policy? Will designating Outstanding Resource Waters cause economic hardships for communities and individual landowners?

In addressing these issues, the Commission might also wish to consider the following questions:

1. Does the existing antidegradation policy sufficiently protect all high quality waters, and
2. How does the EQC evaluate important social and economic factors in considering whether to protect or lower water quality?

**Toxic Pollutants**

1. Should adoption of standards, such as for chloride, be postponed because economic hardships may be created to meet them?
2. Should adoption of freshwater acute and chronic toxicity values for aluminum be postponed until a method is developed and approved for analyzing the toxic form of the metal?

3. Should the dioxin standard be revised in light of the latest scientific information?

**INTENDED FOLLOWUP ACTIONS:**

Upon completing the review of oral and written testimony, staff will develop proposed rule language revisions as needed and prepare a report requesting Commission action on final water quality standards revisions.

At this time, the Department intends to propose revisions to the following standards:

Antidegradation  
Biological Criteria  
Mixing Zones  
Toxic Pollutants

The Department also continues to review the hearing record with respect to the Bacteria standard to determine whether the propose standard should move forward in June or whether it would benefit from additional review through a technical committee. The Department will make a recommendation on this issue at the June EQC meeting.

The Department, in the November 2, 1990 EQC staff report, stated that a technical advisory committee would be appointed to review proposed rule language for several standards issues including:

Temperature  
Total Dissolved Solids  
Sediment Quality Standards  
Toxicity Equivalency Factors  
Interim Sediment Quality Guidance

At this time, the Department would also recommend that two other standards be reviewed by the technical committee. This includes:

Dissolved Oxygen - The technical information surrounding the dissolved oxygen standards is very complex and there is some disagreement over how to interpret this information. There are several policy issues affecting the standards which also need to be examined.

Wetlands - The Department recently received an EPA grant to develop wetland standards. This grant was received after the current triennial review process was initiated. Much of the work being conducted under this grant will provide substantial information on wetland standards. The Department would recommend that the Commission postpone action on adding a wetlands definition to the rules and amending the definition of waters of the state until the information from this project is available for integration into the discussion on the standard.

In addition to these proposed water quality standards revisions, the Department had proposed adding fish tissue guidance values to the rules in an effort to identify those values upon which the Department would evaluate toxic data to indicate where additional study is needed. There has been some confusion over the use of these guidance values and therefore the Department will also be taking these fish tissue guidance values to the technical committee for review. We will not be recommending that these guidance values be adopted in rule at the June meeting. The Department will however, after the technical review, issue a Departmental Guidance Document containing the fish tissue values that will be used to evaluate the toxic data collected by the Department or submitted to the Department.

It is the intent of the Department to appoint the technical committee within the next 90 days. A schedule will be developed to identify the issues to be examined and the priority for their review.

Approved:

Section: Neil Mullane

Division: Rydia Taylor

Director: Jill Hunt

Report Prepared By: Krystyna Wolniakowski  
Gene Foster  
Date Prepared: April 15, 1991

**ANTIDegradation POLICY--  
COMMENTS AND ISSUES SUMMARY**

The following summarizes the main issues that emerged during public hearings held in January 1991 and in public comments that were submitted in writing by March 2, 1991, on the proposed antidegradation policy rule changes.

**Major Issues:**

- o Definition of Antidegradation: Is it a water quality protection policy or a water quality degradation policy? Is the policy providing adequate protection from increased loads for high quality water or is it just a process for allowing sources to receive load increases?
- o Outstanding Resource Waters (ORW):
  - Should the proposed rule automatically designate the waters listed in the current rule such as Wild and Scenic Rivers, State Parks, National Parks, and national Wildlife Refuges. If not designated, could degradation or lack of adequate protection of their values be the result?
  - Should the public be required to provide data for nominating outstanding resource waters?
  - Should all waters of Oregon be considered to be ORW and protected as such?
  - Will designating any ORW lead to economic hardships for communities and individual landowners?
  - Is a non-degradation policy necessary and realistic?
- o Existing Policy for High Quality Waters:
  - Does the proposed antidegradation policy sufficiently protect high quality waters?
  - How does the EQC evaluate important social and economic factors in considering whether to protect or lower water quality?

## DISCUSSION:

### 1. Clarifying the Meaning of Antidegradation

The Antidegradation Policy identifies three water quality protection approaches. The first level of protection is for high quality waters that meet or exceed the numeric and narrative water quality standards. Protective actions are to be implemented such that water quality is maintained at its existing levels in high quality waters. Only under special circumstances, when all other options are exhausted, can water quality be lowered. The Department does not view the antidegradation policy as a means to degrade water quality down to the standards, even if reserve capacity were maintained. Rather, it is a systematic methodology for evaluating potential load increases to determine if they will be allowed. The Department's water quality program is designed to prevent pollution and protect all high quality waters of the state at their existing levels. Only after careful and deliberate consideration should water quality be lowered.

The second is for waters that do not meet water quality standards. Those "water quality limited" waterbodies must comply with a non-degradation approach--they may not be degraded any further and steps must be taken to improve water quality so that they meet water quality standards.

The third is for high quality waters where an additional level of protection is needed, in some cases, to assure that water quality may not be altered, under any circumstances, that would affect any of the outstandingly remarkable values of those waterbodies. The Department recognizes that all waterbodies have outstandingly remarkable values that should be protected. However, this maximum level of protection assures that certain waterbodies will remain minimally affected by human influence in a natural state of ecological diversity. These waters could be designated as Outstanding Resource Waters.

Several comments were received that questioned whether the antidegradation policy was a policy for protecting water quality of state waters, or whether it was a policy for how to degrade water quality. Other comments were received that it was unrealistic and unnecessary to protect all waters of the state as if they were high quality waters, that some waters do not meet standards (or that natural water quality does not meet standards), so protection should not be needed.

In general, there was confusion over the protection needed for high quality waters. Some viewed the policy to be interpreted that if water quality is better than standards, then that water quality should be protected. Other viewed the amount of water quality that was better than standard, as "room for lowering water quality" down to the standard.

Should the Antidegradation Policy be renamed to more accurately reflect the water quality protection approaches for waters of the state, i.e. "The Water Quality Protection Policy for Water Quality Limited Waterbodies", "The Water Quality Protection Policy for High Quality Waters", and "The Water Quality Protection Policy for Outstanding Resource Waters"?

## 2. Outstanding Resource Waters

### Who Nominates Outstanding Resource Waters?

The proposed rule language for nominating outstanding resource waters states that the Department, the Commission or members of the public may nominate waters to be designated as Outstanding Resource Waters. If the public were to propose candidates for designation, they will need to provide information to the Commission regarding the need and the type of management that would be appropriate to protect the outstanding values of those waterbodies. The Department may also nominate those waterbodies, based on information the Department has available.

Comments were received from respondents who were concerned that the public may know which waters they believe should be considered for designation, but they do not have the data, nor the means to obtain the data to support a nomination application. On the other hand, if the public were to rely on the Department to conduct the work necessary for designating waterbodies, many waterbodies would not be able to be considered due to the Department's budget and resource constraints. Several commentors felt that it was the Department's responsibility to provide the data and support the nominations, and that the public should not bear the "burden of proof" by providing data for which waters in Oregon need special protection over and beyond the level needed for protecting high quality waters, since they often do not have the data or the resources to obtain the information.

The Department believes that a public nomination process is needed to provide an opportunity for those who do have information on particular waterbodies to submit that information to the Department and EQC for consideration. In addition, the Department may nominate those waterbodies where existing information demonstrates the need for a non-degradation policy to be implemented to protect the outstanding resource values that are not currently protected under the high quality waters protection approach.

The issue is, should the Department, as the state steward for water quality protection, take an aggressive role in identifying the waters for added protection and development management plans, without the needed resources, at the expense of other critical programs? Should the public provide the information and the Department only review it? Or should there be a combination of the two, with schedules for identifying those waters based on a "basin of the year" evaluation, and amount of work done dependent on funding?

#### Automatic Designation for Certain Waterbodies

Several comments were received that certain waterbodies, already designated under other state and federal programs and policies, should automatically be designated as Outstanding Resource Waters.

For example, under the existing Antidegradation Policy, specific waterbodies are listed to call attention to their importance as special waters of the state. Those currently listed include: National Wild and Scenic Rivers, State Parks, National Wildlife Refuges, and National Parks. The debate is whether these should automatically be designated as ORW based on the interpretation of the current rule, and the intent behind those waters being designated as "special waters" under other state or federal programs. Because they are listed separately from high quality waters, it may be interpreted that these waters should be protected at a higher level for their special resource values, over and above a high quality waters protection program. In addition, a state or federal designation of Wild and Scenic Rivers should be recognized and incorporated as an outstanding state resource as well.

However, the current policy states that the beneficial uses of these waters should be protected. It does not specifically describe non-degradation of existing water quality.



If the current policy is interpreted as non-degradation of water quality of those specially mentioned waters, then the proposed rule would be "back-sliding" by removing them from automatic designation as outstanding resource waters.

If the current policy is strictly interpreted as non-degradation of beneficial uses, then the proposed policy is consistent with that approach, and the opportunity still remains to identify and nominate any of those waters for outstanding resource waters category, as needed.

The federal antidegradation policy requires the states to establish an Outstanding Resource Water category. The federal language is "no degradation shall be allowed in high quality waters which constitute an outstanding National resource, such as (emphasis added) National and State Parks and Wildlife Refuges and waters of exceptional recreational and ecological significance." They give the example of outstanding resource waters, but leave it up to the state's discretion to decide which waters to include in their state ORW.

Should Oregon automatically designate those specially mentioned waters included in DEQ's current antidegradation policy, which reflect waters that have been specially designated by other state and federal programs? Or should Oregon have the nomination process applicable to all waters of the state, and individually decide where water quality needs special protection over and above high quality water protection levels, and develop management plans for those waterbodies?

Aren't All Waters Of Oregon Outstanding in some way?

Comments were received that all of Oregon's waters are outstanding and should be protected at existing levels for generations to come and that any new growth and development should be accomplished within existing limits, and no further degradation should be allowed of any waterbodies in Oregon.

The Department believes that the existing policy for protecting high quality waters recognizes that outstanding character and beneficial uses must be protected. Only under certain circumstances will water quality be allowed to be lowered, when no other alternatives exist, and reserve capacity is available.

Should all waters be considered outstanding resource waters, and no further degradation be allowed?

### Will Designation of ONRW Lead to Economic Hardships for Communities and Landowners?

Several respondents commented that designating any waters of Oregon as outstanding resource waters will lead to a moratorium on growth and development that will lead to economic hardship for communities. In addition, landowners may not be allowed to conduct any activities that may in some way affect water quality, regardless of whether there is an insignificant, but measurable, effect on the water quality.

The purpose of designating an outstanding resource water is to provide more stringent protection for water quality values that may be sensitive, or to provide protection for critical aquatic life habitat. If through the information gathered, there will need to be a non-degradation policy applied to certain waterbodies, a management plan will be developed that will identify what activities are acceptable and unacceptable to protect those waters. The management plan would be reviewed by the public, the communities and landowners to determine the exact nature of the economic impacts of designation. However, if a waterbody requires special protection, there may be certain activities that will not be allowed in order to protect those special, sensitive values.

Does non-degradation mean non-development, even if a management plan is designed to clearly identify the activities that are and are not permitted in or near an outstanding resource waterbody?

### 3. Analysis of Economic and Social Reasons to Lower Water Quality

Several comments were received that questioned the types of economic and social reasons that would be used to justify lowering water quality in high quality waterbodies. In addition, respondents questioned whether the cost lowering water quality in terms of impacts to the ecological integrity of the resources, would be weighed equally with the costs to the communities of not lowering water quality.

The current high quality water protection program requires that all alternatives to a discharge to public waters be evaluated and the costs identified since the clear policy preference is for "no-discharge" alternatives. When proposals or permit applications are received for activities that may lead to measurably

lowering water quality, the Department evaluates all the alternatives to lowering water quality, such as no-discharge requirements, meeting advanced secondary treatment levels, or implementing best management practices, and how much each of those alternatives costs to implement. The Department also reviews the assimilative capacity of the waterbodies, whether a measurable change in water quality may result, and determines if the ecological integrity of the waterbody will be protected. Based on that information, and frequently on public review and comments, the Department, or the EQC then evaluates the levels of acceptable risk to the resources, and decides whether protection of existing water quality or whether lowering water quality to accommodate the additional loads is more appropriate.

Many factors are involved in the decisions that are made to lower water quality.

#### ISSUES FOR COMMISSION CONSIDERATION

1. Is the high quality water protection policy adequate to protect all the high quality waters of Oregon?
2. Should the Antidegradation Policy be divided into three distinct policies for Water Quality Limited, High Quality and Outstanding Resource Waters?
3. Should the Department aggressively pursue designation of Outstanding Resource Waters as a priority over other water quality protection programs, or wait for nominations to be submitted by the public?
4. Should the waters listed in the current policy, such as Wild and Scenic Rivers, National and State Parks, and National and State Wildlife Refuges be automatically included as outstanding resource waters under the proposed policy, with additional nominations being made from time to time by the Commission, the Department, and the public?
5. Can a non-degradation policy for outstanding resource waters be implemented without substantial economic hardship to communities and landowners?
6. Is the Department and Commission review process adequate to evaluate and weigh the costs of protecting high quality and outstanding quality waters vs allowing lowering water quality to accommodate growth and development?

**TOXIC POLLUTANTS -- PRINCIPLE COMMENTS AND ISSUES SUMMARY**

The following summarizes the concerns expressed in public testimony and identifies policy issues that will also need to be addressed in the resolution of the concerns expressed.

**Water Quality Criteria for 2,3,7,8-TCDD (Dioxin)**

**Principle Comments:**

1. The water quality criteria should be less stringent for the following reasons:
  - o The cancer potency factor used by the USEPA in the development of the criteria is inappropriate in light of recent information.
  - o Changes in the bioconcentration factor and fish consumption rate would not offset the change in the cancer potency factor, resulting in a less stringent criteria.
  - o The risk level of one in a million should be changed to one in one-hundred thousand.
2. The water quality criteria should be more stringent for the following reasons:
  - o The criteria do not address the other dioxin and furan congeners that are toxic.
  - o The criteria do not address existing human body burdens.
  - o The criteria do not address human reproductive effects.
  - o The criteria do not address wildlife effects.
  - o The bioconcentration factor and fish consumption rate used in the criteria are low and should be increased to reflect current understanding of these factors.
3. The proposal for adoption of an aquatic life water quality standard is premature as the rationale and the standard lacks scientific merit.
  - o The standard is based on one study.

- o The standard derivation does not follow the USEPA guidelines for standard development. The standard is more stringent than present USEPA criteria.
4. The proposed aquatic life water quality standard should be 3.8 ppq for acute exposures and 1 ppq for chronic exposures.
  5. The proposed aquatic life standard is not protective of aquatic life as a NOEC has not been established. The standard could potentially result in tissue residues greater than 1 ppt. An acute criteria of 0.000006 pg/l and chronic criteria of 0.000006 pg/l was recommended.
  6. Epidemiological studies should be used for assessing the cancer potency.

**Issues for Commission Consideration:**

The Department did not take to hearing a proposal to modify the existing dioxin standard. Even so, comments were received on the triennial review issue paper on this subject and on the existing dioxin standard.

1. Should the dioxin standard be revised in light of the latest scientific information?

**Aluminum and Chloride Toxicity Values**

Principle Comments:

1. The USEPA aquatic life criteria values are too stringent based on a review of the available published literature. The criteria values should be as follows:

Aluminum	Acute: 1500 ug/l	Chronic: 748 ug/l
Chloride	Acute: 1720 mg/l	Chronic: 440 mg/l

2. Chloride toxicity is more a function of metal content and should be regulated on the basis of the metal concentration and not the chloride concentration.
3. There is not an analytical method appropriate for measuring the toxic aluminum species.

**Issues for Commission Consideration:**

1. Should adoption of standards, such as for chloride, be postponed because economic hardships may be created to meet them?

2. Should adoption of freshwater acute and chronic values for aluminum be adopted before a method is developed and approved for analyzing the toxic form of the metal?

### **Toxics Substances Generally**

#### **Principle Comments:**

1. Rule language should be clarified and technical support documents and water quality criteria documents should be referenced.
2. Rule language should be adopted stating that the waters will also be kept free of materials that have a reasonable potential to cause or contribute to an excursion above any water quality standard.
3. The Department should do a better job of risk communication to the public.
4. Rule language that addresses the protection of species that are or may have been within an area being considered for site specific standards should be adopted.
5. The rules should specify a requirement for the Department to use published scientific literature for the establishment of criteria when no published USEPA criteria are available.
6. Bioassays are not an appropriate use of fisheries.

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: April 15, 1991

TO: Environmental Quality Commission

FROM: Lydia Taylor, Water Quality Division Administrator  
Barbara Burton, Municipal Wastewater Section Manager

SUBJECT: April 25, 1991 Work Session Agenda Item 4 - Combined  
Sewer Overflow Strategy: Overview and General  
Discussion

The Environmental Protection Agency adopted a National Combined Sewer Overflow Strategy on August 10, 1989. One element of that strategy was to require that each state provide an implementation plan consistent with the national strategy. The Department developed and submitted to EPA Oregon's implementation plan on February 28, 1991. This agenda item is to review and discuss Oregon's combined sewer overflows, and strategy for addressing them.

Oral presentation

1. Introduction
2. Description of what combined sewers are
3. Description of the pollution problems caused by combined sewers
4. Listing and brief evaluation of remaining combined sewers in Oregon
5. Brief discussion of what federal and state standards must be met by a combined sewer overflow control program
6. Brief discussion of possible control measures
7. Overview of what is happening nationally in combined sewer overflow controls
8. Review of Oregon's proposed implementation plan

Attachment - "Oregon's Strategy for Regulating Combined Sewer Overflows"

## OREGON'S STRATEGY FOR REGULATING COMBINED SEWER OVERFLOWS (CSOs)

### PURPOSE

This document outlines Oregon's Strategy for Regulating Combined Sewer Overflows (CSOs) in response to the national Combined Sewer Overflow Strategy issued by the Environmental Protection Agency on August 10, 1989. The national strategy calls for states with delegated NPDES permit programs to regulate CSO discharges in accordance with the Clean Water Act requirements for point source discharges. The national strategy published in 54 Federal Register 37370 (September 8, 1989) calls for states to submit statewide permitting strategies by January 15, 1990 to ensure implementation and consistency with the national strategy.

The sections of the strategy include: a) a recapitulation of the national strategy in the Background section, b) identification of known CSO discharge points in Oregon, c) a description of completed actions underway to address CSOs and raw sewage bypasses, d) factors affecting the Department's approach for dealing with remaining CSOs, and e) a description of the Department's approach to implementing the ten elements in the National CSO control strategy.

### BACKGROUND

The federal Environmental Protection Agency issued a National Combined Sewer Overflow (CSO) Control Strategy in August 1989. The strategy requires that all CSOs be identified and categorized according to their compliance with technology-based requirements. The strategy calls upon the states to develop a statewide strategy by January 15, 1990 for the development and implementation of measures to reduce pollutant discharges from CSOs.

The national strategy sets forth three objectives:

1. To ensure that if CSO discharges occur, they are only as a result of wet weather (rainfall events),
2. To bring all wet weather CSO discharge points into compliance with the technology-based requirements of the Clean Water Act (CWA) and applicable state water quality based standards, and
3. To minimize water quality, aquatic biota, and human health impacts from wet weather overflows.



The national strategy confirms that CSOs are point sources, independent of the treatment systems of publicly-owned treatment works (POTWs), and specifies that both technology-based and water quality-based requirements apply to CSOs. The national strategy specifies that CSOs which are discharging without a permit are unlawful and must be issued a permit or be eliminated.

EPA's national CSO strategy calls for permits which establish technology- and water quality-based requirements to be developed expeditiously to minimize potential adverse impacts of CSOs. The EPA strategy also discusses elements that are to be included in each state's strategy as follows:

1. Identification. CSO point sources currently discharging are to be identified by community. The CSO's should be categorized as to whether they are: a) not permitted, b) permitted in conjunction with a POTW, or c) permitted separately from a POTW. The strategy also calls for a status of compliance with technology- and water quality-based controls for each CSO.
2. Priorities. The strategy calls for the states to set priorities in permitting and controlling the unpermitted and "insufficiently" permitted CSOs. The states' strategy should describe completed and planned actions and timing to bring dischargers into compliance based on a system-wide evaluation of known or suspected impacts from CSOs. The national strategy considers CSO discharges into marine or estuarine waters to be a priority.
3. Permit Issuance. The national strategy suggest that a single, system-wide permit be issued whenever possible for all discharges, including overflows, from a combined sewer system operated by a single authority.

Where different parts of a single combined system are owned and/or operated by more than one authority, permits issued to such authorities should require joint preparation and implementation of the strategy requirements and the responsibilities and duties of each owner/operator should be stipulated.

4. Compliance Schedules. CSOs that discharge toxic pollutants into water bodies listed under paragraph (B) of Section 304(1) of the CWA are additionally regulated under Section 304(1) and must achieve applicable water quality standards. Where applicable technology- and water quality-based limitations cannot be met, the permit should contain the statutory dates and public notice should be given simultaneously with an enforcement order requiring compliance within the shortest reasonable time.

5. Minimum Technology-Based Limitations. The national strategy calls for CSO discharges to require the following as minimum BCT/BAT, established on a Best Professional Judgement (BPJ):
- a. Proper operation and regular maintenance programs for the sewer system and CSO points.
  - b. Maximum use of the collection system for storage.
  - c. Review and modification of pretreatment programs to assure CSO impacts are minimized.
  - d. Maximization of flow to the POTW for treatment.
  - e. Prohibition of dry weather overflows.
  - f. Control of solid and floatable material in CSO discharges.
6. Additional CSO Control Measures. Section 301(b)(1)(C) requires additional permit limits that may be necessary to protect state water quality standards. Additional control measures that should be considered to bring about compliance with technology and water quality standards include:
- a. Improved operation and maintenance.
  - b. Best management practices.
  - c. System-wide stormwater management programs.
  - d. Supplemental pretreatment program modifications.
  - e. Identification and elimination of illegal discharges.
  - f. Monitoring requirements.
  - g. Pollutant specific limitations.
  - h. Compliance schedules.
  - i. Flow minimization and hydraulic improvements.
  - j. Direct treatment of overflows.
  - k. Sewer rehabilitation.
  - l. In-line and off-line storage.
  - m. Reduction of tidewater intrusion.

- n. Construction of CSO controls within the sewer system or at the CSO discharge point.
  - o. Sewer separation.
  - p. New or modified wastewater treatment facilities.
7. Monitoring. The national strategy calls for cost effective monitoring to serve three purposes: a) to characterize CSO discharges (i.e., their frequency, duration, and pollutant loadings), b) to evaluate the water quality impacts, and c) to determine compliance with CSO permit requirements.

The strategy recognizes that discharge monitoring and/or modelling, wasteload allocations that address rainfall related hydraulic conditions and stream surveys may be necessary to measure the extent to which CSO discharges are causing violations of technology-based limitations or water quality-based limitations, and to design corrective programs.

The strategy calls for permits to require development and implementation of monitoring plans or programs to assure data needs are achieved.

8. Water Quality Standards Modification. Compliance with water quality standards must be assured and the applicability of existing water quality standards cannot be waived. The national strategy notes, however, that in limited cases, it may be appropriate to adjust some of the water quality standards to address the impact of pollutants in wet weather flows. The strategy encourages monitoring, modeling, and wasteload allocation procedures to quantify influences and formulate control strategies to address rainfall-related hydrologic conditions. Any proposed modification of states' water quality standards must be done in accordance with 40 CFR 131.10(g). Changes in designated uses or the establishment of subcategories of uses must be made on a site-specific basis in accordance with 40 CFR 131.10(j).
9. Funding. The national strategy notes that CSOs which cause adverse impacts on water quality and human health should be considered for funding. CSO corrections are fundable under the Construction Grants and State Revolving Loan Fund programs, but significant limitations apply.
10. Permit Application Forms. The national strategy calls for use of permit applications form EPA Form 7550-22 for CSOs that are to be permitted in conjunction with a POTW. EPA Form 3510-2C is to be used for CSOs that are to be permitted separately from a POTW. For new CSOs, NPDES Form 2D (EPA Form 3510-2D) should be submitted.

## AFFECTED MUNICIPALITIES

A preliminary identification of Oregon communities with combined storm and sanitary sewers (previously constructed to deliberately convey both sanitary and stormwater flows) include:

1. The City of Portland: 12 CSOs to Columbia Slough and 43 to the Willamette River. None of these outfalls are covered by a permit, however, all are proposed to be addressed in the Portland - Columbia Blvd STP permit renewal.
2. The City of Astoria: Estimated 41 CSOs to the Columbia River. None of these outfalls are addressed in the City's permit by number, however a permit condition (now superceded by an Administrative Order) requires the CSOs to be identified, quantified, and characterized.
3. The City of Corvallis: 1 CSO to the Willamette River. The draft permit renewal identifies this CSO and requires flows to be quantified. The current permit required separate sewer overflows to Dixon Creek and the Mary's River to be eliminated by 1990. This project was completed.
4. The Tri-City Service District in combination with the Cities of Oregon City and Gladstone: 1 active CSO to the Willamette River, 1 active CSO to the Clackamas River and 1 active CSO to Singer Creek. The existing permit requires completion of sewer system separation projects identified as part of an EPA construction grant C410493-09-0 by no later than April 1, 1993.

In addition to the municipalities listed above, there may be other communities whose sewer systems may include a portion of combined sanitary and stormwater sewer lines, but no specifically designated CSO relief for excessive flows. These communities would ordinarily be identified as having illegal discharges associated with bypasses (overflows) and be required to report these overflows on discharge monitoring reports and in accordance with General Conditions of their NPDES permit. As these may be reported, corrective action including compliance schedules incorporated into permits requiring inflow and infiltration analysis, sewer system evaluation surveys and cost-effective analysis of I/I removal and treatment to eliminate overflows is required. (See summary of actions below.)

COMPLETED ACTIONS TO ADDRESS DISCHARGES FROM COMBINED STORM AND  
SANITARY SEWERS

Over the past decade, Oregon generally has not differentiated between overflows from combined and separate sanitary sewers, though compliance efforts to address overflows has, to a greater extent, focused on raw sewage bypasses (overflows) from separate systems.

In 1981, the Oregon Environmental Quality Commission (EQC) adopted rules specifying that: "Sewerage Construction programs should be designed to eliminate raw sewage bypassing during the summer recreation season (except for a storm event greater than the 1 in 10 year 24 hour storm) as soon as practicable. A program and timetable should be developed through negotiation with each affected source. Bypasses which occur during the remainder of the year should be eliminated in accordance with an approved longer term maintenance based correction program. More stringent schedules may be imposed as necessary to protect drinking water supplies and shellfish growing areas." (OAR 340-41-034(3)(f))

This policy provided a means by which overflows from either combined or separate systems would be prioritized for reduction and/or elimination. For example, overflows caused by both separate and combined sewer in North Bend, Oregon (which were found to be contributing to shellfish growing water problems) resulted in North Bend undertaking correction action which includes: 1) separation of combined sewers which comprised a portion of their system; 2) upgrading their pump station; 3) inflow and infiltration correction; and 4) undertaking an STP expansion project to eliminate wet weather overflows except in a one in five year storm event.

Similarly, Coos Bay whose sewer system responded like a combined system, was placed under a Compliance Order to eliminate overflows that contribute to shellfish growing water contamination and provide reliable treatment for wastewater flows. The City of Coos Bay recently completed necessary improvements.

Within the Willamette Valley, many permittees who experienced overflows during the summer recreation period have been required to undertake corrective action to eliminate summer overflows to tributary streams and to the Willamette River. The permittees have included the City of Albany, who had a combined system and elected to separate it, and the City of Salem, who is under a longer term permit schedule for elimination of overflows from its separate sanitary sewer.

The City of Rainier recently installed a separate storm sewer system to eliminate overflows into tributaries and the Columbia River. The City's NPDES permit included phased storm sewer construction to be concluded by 1992. The City successfully completed to work in October 1987 with the financial assistance of an Oregon Community Development Program Grant.

In keeping with the policy to eliminate raw sewage bypasses, the Department has required the City of St. Helens to eliminate its overflows to tributaries and the Columbia River except in a 1 in 5 year wet weather storm event. The City is designing improved facilities to convey and treat all flows, some of which are due to a portion of their system serving (yet not designed) to convey storm water.

Most recently, as permits have come up for renewal, all permittees with reported overflow points from either separate or combined systems have either been placed under a compliance schedule to eliminate overflows in accordance with the Environmental Quality Commission policy or are being required to characterize their overflows to assess the frequency and duration of overflows to aid in determining further compliance actions that may be needed.

These past actions did not anticipate the EPA's national strategy for permitting CSOs; however, they acknowledge the Clean Water Act objectives to address point sources of pollution which can affect compliance with water quality standards and beneficial use protection.

Prior to Oregon receiving the national CSO strategy, the Department of Environmental Quality had in place a mechanism for addressing overflows from both combined and separate sanitary sewers. Both the national CSO strategy, as well as the state's Clean Water Strategy which are directed at water quality based permit limits, now require the Department to reevaluate its water pollution control policies and approach for dealing with remaining CSOs.

#### FACTORS THE DEPARTMENT CONSIDERS RELEVANT IN EVALUATING APPROACHES FOR DEALING WITH REMAINING CSOs

The Department's past efforts to address overflows have focused on:

1. Responding to documented water quality problems resulting from overflows from either combined sewers or separate sanitary sewers, especially where community support for their elimination has been greatest, and

2. Concentrating on eliminating summer overflows, when potential impacts are most severe for water contact recreational activities and other beneficial uses; and
3. Incorporating compliance conditions to address the existing policy on discharges of raw sewage upon renewal of permits and in response to grant applications.

The significant remaining combined sewer overflows are within larger communities and may be the most expensive to address. The Department has limited data to document their impacts on beneficial uses and their contribution to instream water quality standards violations when it rains.

Since both the national strategy and the Department's own Clean Water strategy are now more directly geared to impact analysis on water quality (as compared to limiting efforts to technology based controls), additional data will need to be collected and analyzed to determine impacts of remaining CSOs and appropriate water quality based limitations.

#### IMPLEMENTATION OF TEN ELEMENTS IN NATIONAL STRATEGY

1. Identification. The five Oregon cities with CSO's (Portland, Astoria, Oregon City, Gladstone, and Corvallis) have identified all discharge points from their systems. These CSO discharge points are not included in the four existing (expired) NPDES permits issued for the sewage treatment facilities and associated sewer systems (the Oregon City and Gladstone sewer systems are included in the one Tri-City Service District permit). All CSO's will be identified and listed as permitted discharge points in the four permits that are expected to be issued by June 30, 1991.
2. Priorities. Oregon City, Gladstone, and Corvallis are on schedule to eliminate their remaining combined sewer systems by no later than 1993. The Department intends no further action for these three cities in implementing the National CSO strategy, other than including the discharge points in permit renewals and including the applicable compliance schedules for separating the sewer systems.

Twelve of Portland's 56 CSO's discharge to Columbia Slough, which has been designated as Water Quality Limited. The CSO's have been identified as the largest contributor to the fecal coliform violation. The Department is in the process of negotiating a Memorandum of Agreement with the City of Portland to undertake necessary actions to bring this water body into compliance with Oregon's water quality standards. It is expected that this portion of Portland's combined system will be the first to be controlled.

The Astoria CSO's are all to the Columbia River. Although technically an estuary because of some salt water intrusion, it does not support recreational or commercial shellfish harvesting.

For the remaining CSO's in Portland and Astoria, the Department does not have sufficient data regarding the water quality impacts of the CSO's, or information on characterization of the discharges, or possible corrective programs to set priorities. Permits for Portland and Astoria have been drafted and are expected to be issued by June 30, 1991. Both permits include schedules for initiating studies to characterize the discharges, evaluate the impact of the CSO discharges on the receiving streams, and an evaluation of possible control strategies. The Department will also be conducting water quality evaluations as part of the Willamette and Columbia River studies.

The highest priority for managing or eliminating CSO discharges will be for those CSO's violating water quality standards, especially where the discharges occur during the summer recreational season.

3. Permit Issuance. A single, system-wide NPDES permit will be issued for each of the following cities with CSO's: Portland, Astoria, and Corvallis. The CSO's for the cities of Oregon City and Gladstone will be included in the Tri-City Service District permit. Permit renewals that include conditions related to CSO's are expected to be issued in 1991.
4. Compliance Schedules. Each city will be required to prepare and submit an approvable facility plan to study the CSO's. The facility plan will include the following elements: 1) a characterization of the CSO discharges (volume, time, content of discharges); 2) an evaluation of the impact on water quality from the discharges; 3) an evaluation of the minimum technology based limitations, and how they would be implemented for each CSO; 4) an evaluation of other control measures including separation of the sewer systems and treatment of each discharge point; 5) an analysis of the level of controls required to attain compliance with water quality standards; 6) a cost analysis of the control strategy required to attain water quality standards; and 7) a proposed schedule for implementing recommended control measures. Once the facility plan has been completed, the Department will negotiate implementation schedules with Portland and Astoria.



The length of time allowed for control of any individual CSO will depend on the seriousness of the water quality impact, and the relative ease of compliance. The Department will pursue compliance on as tight a time schedule as practicable, but expects total compliance with both water quality standards and the technology based limitations by no later than 2010. This extended period may be required if complete separation of the sewer systems is the indicated control measure, based on the high cost of sewer separation projects.

In the event that a compliance schedule in excess of ten years is proposed, the Department will consider requiring additional interim control measures to minimize the water quality impacts of the CSO's. The negotiated schedules will be included in Stipulated Final Orders.

5. Minimum Technology-Based Limitations. Both Astoria and Portland will be required to meet the minimum technology-based limitations as set forth in the National CSO Control Strategy. Each permit will include a schedule requiring the permittee evaluate these limitations for each CSO, taking into account the factors listed in 40 CFR 125.3 (d). If water quality standards are violated and the minimum technology based limitations are not sufficient to attain compliance, these limitations may be waived in lieu of more stringent control measures.
6. Additional CSO Control Measures. In addition to or in lieu of the minimum technology based limitations, the Department will require whatever level of controls including separation of sewer systems is necessary to achieve water quality standards. The applicable water quality standards to be met are included in Oregon Administrative Rules (OAR) 340-41-202 for Astoria, and OAR 340-41-442 for Portland. These rules require that water quality standards be met outside of a mixing zone in the immediate area of each discharge point, and that no "floating debris, oil, scum, or other materials that cause nuisance conditions" be present in the discharge. Included in the water quality standards is a fecal coliform limit of 200/100 ml, as well as standards for dissolved oxygen, pH, temperature, toxic substances, and other parameters.

Each City will be required to evaluate the size of mixing zone around the CSO's, and then evaluate the controls necessary to meet water quality standards. The control measures chosen will be the most cost effective measures that will assure that water quality standards are met.

7. Monitoring. As previously described, both Portland and Astoria will be required to prepare and submit a facilities plan for their CSO's. Included in the facilities plan will be monitoring sufficient to characterize the CSO's (frequency, duration, and pollutant load), an evaluation of the impact on water quality of the discharges, and an evaluation of whether or not the discharges meet water quality standards and meet the minimum technology limitations relating to water quality. Each City will be required to develop and submit a detailed study plan for Department approval. These initial proposed study plans are tentatively scheduled to be submitted by December 31, 1991. Each City also will be required to develop a model to evaluate both the impact of existing CSO's, and the impact of various proposed control measures.

The Department intends to conduct increased monitoring for the Willamette River and the Columbia River during the next five years.

8. Water Quality Standards Modification. The Department is currently undergoing the triennial standards review. No relaxation of standards is being proposed, however a change from fecal coliform to enterococcus is proposed for all Oregon basins. Enterococcus is considered a better indicator organism for the potential presence of human pathogens. This change may affect which CSO control strategies are chosen, since storm runoff typically contains fecal coliform from non-human wastes.
9. Funding. All remaining Construction Grants funds in Oregon are expected to be awarded by September 30, 1991. None of the cities with CSO's will be receiving grant awards for their CSO's. Oregon has not yet met the "first use" requirement for State Revolving Fund monies, and therefore is not now in a position to make SRF loans available for CSO related projects. However, such funds may be available in the future and both Portland and Astoria could apply for such funds.
10. Permit Application Forms. All Oregon CSO's will be included in permits issued to the associated POTW's. Standard EPA application forms will be used.

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: April 15, 1991

TO: Environmental Quality Commission

FROM: Lydia Taylor, Water Quality Division Administrator  
Barbara Burton, Municipal Wastewater Section Manager

SUBJECT: April 25, 1991 Work Session Agenda Item 5 - Proposed Stipulated Order for Portland: Summary of Order and Public Comments

The Department is proposing to issue a Stipulation and Final Order to the City of Portland. The subject of the Order is the City's combined sewer overflows. The Department believes that these overflows do not comply with either federal standards for minimum treatment standards for such discharges, or Oregon's water quality standards. The proposed Order includes a detailed compliance schedule and stipulated penalties for a number of actions needed to bring the discharges into compliance with state and federal laws and standards.

This agenda item is to review the Department's proposed Order, and to review public comments received.

Oral presentation

1. Portland's CSO's - how many, where they are, and what the pollution problem is
2. How proposed Order, permit, and Memorandum of Agreement (for Columbia Slough TMDL) fit together
3. Brief summary of proposed SFO contents
4. Review of public participation process
5. Brief review of public comments received and Department response
6. Department recommended changes in the proposed Order

Attachments

- Copy of draft Order
- Copies of draft permit and permit evaluation report
- Copy of summary of comments received, and Department responses \*
- Copy of proposed revised Order \*
- Copies of news articles on Portland CSO's

\* Public comment period ends 4/19/91 - these documents will be available 4/25/91

DRAFT

Expiration Date: 3-31-96

Permit Number:

File Number: 70725

Page 1 of 21 Pages

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
WASTE DISCHARGE PERMIT

Department of Environmental Quality  
811 S.W. Sixth Avenue  
Portland, OR 97204  
Telephone: (503) 229-5696

Issued pursuant to ORS 468.740 and The Federal Clean Water Act

ISSUED TO:

City of Portland  
1120 S.W. Fifth Avenue  
Portland, Oregon 97204

SOURCES COVERED BY THIS PERMIT:

	<u>Type of Waste</u>	<u>Outfall Number</u>	<u>Outfall Location</u>
	Domestic Sewage	001	RM 105.5 (Col. R.)
	Domestic Sewage	002	RM 105.5 (Col. R.)
	Combined Sewer Overflows	003 - 056,	
to Willamette River (Will. R.) and Columbia Slough (Col. Slough), as follows:			
S.W. California St.	003 (Will. R.)	S.E. Yamhill St.	030 (Will. R.)
S.W. Taylors Fy. Rd.	004 (Will. R.)	S.E. Alder St.	031 (Will. R.)
S.W. Carolina St.	005 (Will. R.)	S.E. Stark St.	032 (Will. R.)
S.W. Seymour St.	006 (Will. R.)	S.E. Oak St.	033 (Will. R.)
S.W. Lowell St.	007 (Will. R.)	N.E. Glisan St.	034 (Will. R.)
S.W. Woods St.	008 (Will. R.)	N.E. Holladay St.	035 (Will. R.)
S.W. Sheridan St.	009 (Will. R.)	N. Wheeler Pl.	036 (Will. R.)
S.W. Mill St.	010 (Will. R.)	N. Randolph Ave.	037 (Will. R.)
S.W. Jefferson St.	011 (Will. R.)	N. Beech St.	038 (Will. R.)
N.W. 9th Ave. (Tanner Creek)		Riverside (Swan Island)	
	012 (Will. R.)		039 (Will. R.)
N.W. 14th Ave.	013 (Will. R.)	N. Van Houten Pl.	040 (Will. R.)
N.W. 15th Ave.	014 (Will. R.)	N. Van Buren Ave.	041 (Will. R.)
N.W. Nicholai St.	015 (Will. R.)	N. Salem Ave.	042 (Will. R.)
N.W. 29th Ave. (Balch Gulch)		N. Alta Ave.	043 (Will. R.)
	016 (Will. R.)	N. Reno Ave.	044 (Will. R.)
Guilds Lake	017 (Will. R.)	N. James St.	045 (Col. Slough)
Glen Harbor	018 (Will. R.)	N. Oswego Ave.	046 (Col. Slough)
N.W. 110th Ave.	019 (Will. R.)	N. Oregonian Ave.	047 (Col. Slough)
S.E. Clatsop St.	020 (Will. R.)	N. Fiske Ave.	048 (Col. Slough)
Garthwick (Waverly)	021 (Will. R.)	N. Chatauqua Pl.	049 (Col. Slough)
S.E. Umatilla St.	022 (Will. R.)	N. Bayard Ave.	050 (Col. Slough)
S.E. Insley St.	023 (Will. R.)	N. Delaware Ave.	051 (Col. Slough)
S.E. Woodward St.	024 (Will. R.)	N. Fenwick Ave.	052 (Col. Slough)
S.E. Taggart St.	025 (Will. R.)	N. Albina Ave.	053 (Col. Slough)
S.E. Division Pl.	026 (Will. R.)	N. Vancouver Ave.	054 (Col. Slough)
S.E. Harrison St.	027 (Will. R.)	N. Willis Blvd	055 (Col. Slough)
S.E. Clay St.	028 (Will. R.)	N.E. 13th Ave.	056 (Col. Slough)
S.E. Hawthorne Blvd.	029 (Will. R.)		

Combined Sewer/Pump Station Overflows 057 - 058,  
to Willamette River (Will. R.) and Columbia Slough (Col. Slough), as follows:

Ankeny Pump Sta.      057 (Will. R.)      Sullivan Pump Sta.      058 (Will. R.)

**PLANT TYPE AND LOCATION:**

Activated Sludge STP  
5001 N. Columbia Blvd.  
Portland, Oregon  
Treatment System Class: IV  
Collection System Class: IV

**RECEIVING SYSTEM INFORMATION:**

Basin: Willamette  
Sub-Basin: Lower Col./Willamette  
Stream: Columbia River  
Hydro Code: 10--COLU 105.5 D  
County: Multnomah

**EPA REFERENCE NO:**      OR002690-5

Issued in response to Application No. 998767 received 2-9-89.

This permit is issued based on the land use findings in the permit record.

\_\_\_\_\_  
Lydia R. Taylor, Administrator

\_\_\_\_\_  
Date

**PERMITTED ACTIVITIES**

Until this permit expires or is modified or revoked, the permittee is authorized to construct, install, modify, or operate a wastewater collection, treatment, control and disposal system and discharge to public waters adequately treated wastewaters only from the authorized discharge point or points established in Schedule A and only in conformance with all the requirements, limitations, and conditions set forth in the attached schedules as follows:

	<u>Page</u>
Schedule A - Waste Disposal Limitations not to be Exceeded...	3-5
Schedule B - Minimum Monitoring and Reporting Requirements...	6-11
Schedule C - Compliance Conditions and Schedules.....	12-17
Schedule D - Special Conditions.....	18-19
Schedule E - Pretreatment Conditions.....	20-21
General Conditions.....	Attached

Each other direct and indirect discharge to public waters is prohibited.

This permit does not relieve the permittee from responsibility for compliance with any other applicable federal, state, or local law, rule, standard, ordinance, order, judgment, or decree.

SCHEDULE A

1. Waste Discharge Limitations not to be Exceeded After Permit Issuance.

- a. Outfall Number 001 and 002 (Sewage Treatment Plant Discharge)  
(Outfall 001 shall be the primary Outfall and discharges from Outfall 002 shall be minimized; however, when plant flow, river stage or necessary maintenance activities limit discharge capacity at Outfall 001, discharge at Outfall 002 may occur).

(1) Year-round

Parameter	Average Effluent Concentrations		Monthly*	Weekly*	Daily*
	Monthly	Weekly	Average lb/day	Average lb/day	Maximum lbs
a. BOD-5	30 mg/l	45 mg/l	25,000	37,500	50,000
b. TSS	30 mg/l	45 mg/l	25,000	37,500	50,000
c. FC/100ml	200	400			

\*Based on average dry weather design flow to the facility equaling 100 MGD.

(2) Other parameters

a. pH

Shall be within the  
range 6.0 - 9.0

b. BOD and TSS  
Removal Efficiency

(May 1 through October 31)  
Shall not be less than 85 percent  
monthly average.

(November 1 through April 30)  
Shall not be less than 80 percent  
monthly average for BOD and not less  
than 75 percent monthly average for  
TSS.

c. Chlorine residual

Shall not exceed 1.5 mg/l

- (3) When, because of excessive storm water inflows, the monthly average flow entering the treatment facility exceeds 100 MGD, the pounds discharged may exceed the limits established in Condition 1.a. above. During those periods the amount of BOD-5 and Suspended Solids discharged shall not exceed a monthly average of 50,000 lb/day each, or a weekly average of 75,000 lb/day each, or a daily maximum of 100,000 pounds each.

- (4) Notwithstanding the effluent limitations established by this permit, no wastes shall be discharged and no activities shall be conducted which violate Water Quality Standards as adopted in OAR 340-41-445 except in the defined mixing zones:

The mixing zones shall consist of a 100 foot radius from the points of discharge.

b. Outfalls Number 003 through 044 (Combined Sewer Overflows to the Willamette River)

- (1) The overflow from these diversion structures shall be minimized as much as practicable at all times. A diversion structure is a part of a combined sewer system which diverts sanitary sewage or combined sanitary/storm sewage into another sewer line which conveys the sewage to the treatment works; when the combined sanitary/storm sewage flow exceeds the capacity of the diversion structure, the excess sewage overflows the diversion structure and is either discharged from an outfall or conveyed to another diversion structure where the process is repeated.
- (2) Notwithstanding the effluent limitations established by this permit, no wastes shall be discharged and no activities shall be conducted which violate Water Quality Standards as adopted in OAR 340-41-445 except in the defined mixing zones (See Note 1):

The mixing zones shall consist of a 100 foot radius from the points of discharge.

c. Outfalls Number 045 through 056 (Combined Sewer Overflows to the Columbia Slough)

- (1) The overflow from these diversion structures shall be minimized as much as practicable at all times. A diversion structure is a part of a combined sewer system which diverts sanitary sewage or combined sanitary/storm sewage into another sewer line which conveys the sewage to the treatment works; when the combined sanitary/storm sewage flow exceeds the capacity of the diversion structure, the excess sewage overflows the diversion structure and is either discharged from an outfall or conveyed to another diversion structure where the process is repeated.
- (2) Notwithstanding the effluent limitations established by this permit, no wastes shall be discharged and no activities shall be conducted which violate Water Quality Standards as adopted in OAR 340-41-445 except in the defined mixing zones (See Note 1):

The mixing zones shall consist of a 100 foot radius from the points of discharge.

d. Outfalls Number 057 and 058 (Ankeny and Sullivan Pump Stations)

- (1) Discharges to state waters from Ankeny and Sullivan pump stations are prohibited except when inflows exceed the maximum capacities of the stations to pump sewage to the treatment works.
- (2) Notwithstanding the effluent limitations established by this permit, no wastes shall be discharged and no activities shall be conducted which violate Water Quality Standards as adopted in OAR 340-41-445 except in the defined mixing zones (See Note 1):

The mixing zones shall consist of a 100 foot radius from the points of discharge.

Note 1: The Department recognizes that water quality standards will not be maintained outside of the designated mixing zone for the Combined Sewer Overflows and combined sewer pump stations overflows when this permit is issued. However, the Department will be addressing the CSOs in a Stipulation and Final Order which will include a corrective action plan and schedule for complying with Water Quality Standards adopted in OAR 340-41-445.



**SCHEDULE B**

1. Minimum Monitoring and Reporting Requirements.  
(unless otherwise approved in writing by the Department)

a. Influent

<u>Item or Parameter</u>	<u>Minimum Frequency</u>	<u>Type of Sample</u>
Total Flow (MGD)	Daily	Flow meter
Flow Meter Calibration	Quarterly	Verification
BOD-5	Daily	Composite
TSS	Daily	Composite
pH	Daily	Grab
TOXICS:		
Metals: (Ag, As, Cd, Cr, Cu, Hg, Ni, Pb, Zn) and Cyanide (CN), measured as total in mg/l (See note 1/)	Monthly using 3 consecutive days between Monday and Friday, inclusive	24-hr daily composite (See note 2/)
Total Phenols (See Note 1/)	Monthly using 3 consecutive days between Monday and Friday, inclusive	24-hr daily composite (See note 2/)
Other parameters:		
Dioxin (See Note 3/)	Quarterly	24-hr composite
Thorium 232	Quarterly	24-hr composite

b. Outfall Number 001 (sewage treatment plant outfall)

<u>Item or Parameter</u>	<u>Minimum Frequency</u>	<u>Type of Sample</u>
BOD-5	Daily	Composite
TSS	Daily	Composite
pH	Daily	Grab
Fecal Coliform	Daily	Grab
Quantity Chlorine Used	Daily	Measurement
Chlorine Residual	Daily	Grab
Average Percent Removed (BOD and TSS)	Monthly	Calculation

NUTRIENTS:

NH <sub>3</sub> -N, NO <sub>2</sub> +NO <sub>3</sub> -N, TKN, Total Phosphate-P (in mg/l)	Weekly between May & October	Composite
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TOXICS:

Metals: (Ag, As, Cd, Cr, Cu, Hg, Ni, Pb, Zn) and Cyanide (CN), measured as total in mg/l (See note <u>1</u> /)	Monthly using 3 consecutive days between Monday and Friday, inclusive	24-hr daily composite (See note <u>2</u> /)
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Total Phenols (See Note <u>1</u> /)	Monthly using 3 consecutive days between Monday and Friday, inclusive	24-hr daily composite (See note <u>2</u> /)
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Toxics Removal	Annually	Calculation (See Note <u>4</u> /)
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Biomonitoring	Bioassay of effluent from Outfall 001 every month between May 1 and Oct. 31 and once between Nov. 1 and April 30.	Acute and chronic bioassay.
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Other parameters: Dioxin (See Note <u>3</u> /) Thorium 232	Quarterly Quarterly	24-hr composite 24-hr composite
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c. Sludge Management

<u>Item or Parameter</u>	<u>Minimum Frequency</u>	<u>Type of Sample</u>
Sludge analysis including: Total solids (% dry wt.) Volatile solids (% dry wt.) Volatile Suspended Solids (% Dry Wt.) Sludge nitrogen NH <sub>3</sub> -N; NO <sub>3</sub> -N; & TKN (% dry wt.) Sludge metals content for Ag, As, Hg, Pb, Zn, Cu, Ni, Cr, Cd (in mg/kg dry weight) Phosphorus (% dry wt.) Potassium (% dry wt.) pH (standard units)	Monthly	Composite sample to be representative of the final belt pressed product. (See Note 5/)
Other parameters: Thorium 232 Dioxin (See note 6/)	Monthly Monthly low resolution, and quarterly high resolution.	Composite sample to be representative of the final belt pressed product. (See Note 5/)
Record of % volatile solids reduction accomplished through digestion	Monthly	Calculation (See Note 7/)
Amount of Compost Produced	Monthly	Measurement
Compost Inventory	Annually	Measurement (See Note 8/)
Record of locations where sludge is applied on land (Site location map to be maintained at treatment facility for review upon request by DEQ)	Each Occurrence	Date, volume & locations where sludges were applied recorded on site location map.

- d. Groundwater (Compost storage area east of and adjacent to treatment plant, and after April 1, 1993, the Triangle Lake sludge lagoon area)

Water level (See Note 9/)	Quarterly, Feb., May, Aug. & Nov.	Measurement
Color	Quarterly, Feb., May, Aug. & Nov.	Grab
Turbidity	Quarterly, Feb., May, Aug. & Nov.	Grab
Chloride	Quarterly, Feb., May, Aug. & Nov.	Grab
NO <sub>2</sub> -N	Quarterly, Feb., May, Aug. & Nov.	Grab
NO <sub>3</sub> -N	Quarterly, Feb., May, Aug. & Nov.	Grab
Sulfate	Quarterly, Feb., May, Aug. & Nov.	Grab
Metals (Ag, As, Hg, Pb, Zn, Cu, Ni, Cr, Cd)	Annually in August	Grab
Priority Pollutants (See Note 10/)	Annually in August	Grab

Notes:

- 1/ For influent and effluent cyanide and phenol samples, at least eight (8) discrete grab samples shall be collected over the operating day. Each aliquot shall not be less than 100 ml and shall be collected and composited into a larger container which has been preserved with sodium hydroxide for cyanide samples, and sulfuric acid for total phenols samples.
- 2/ Daily 24-hour composite samples shall be analyzed and reported separately.
- 3/ Dioxin analyses shall include all of the following chlorinated dibenzodioxins and dibenzofurans: 2,3,7,8-TCDD, 2,3,7,8-PeCDD, 2,3,7,8-HxCDD, 2,3,7,8-HpCDD, OCDD, 2,3,7,8-TCDF, 1,2,3,7,8-PeCDF, 2,3,4,7,8-PeCDF, 2,3,7,8-HxCDF, 2,3,7,8-HpCDF, OCDF. The analytical results shall be expressed both in terms of the concentrations of the individual compounds and in terms of the Toxic Equivalency Factors (TEFs) relative to 2,3,7,8-TCDD using the weighting factors in EPA/625/3-89/016, published March, 1989. The analytical procedure must be capable of measurements in the low parts-per-quadrillion range.

- 4/ Total plant removal rates shall be calculated by first averaging all influent concentrations for a parameter obtained over the year; second averaging all effluent concentrations for a parameter obtained over the year; and finally using these two average concentrations to calculate the parameter's total plant removal.
- 5/ Composite samples from the belt presses shall consist of at least 6 aliquots of equal volume collected over a 24 hour period and combined.
- 6/ Dioxin analyses shall include all of the following chlorinated dibenzodioxins and dibenzofurans: 2,3,7,8-TCDD, 2,3,7,8-PeCDD, 2,3,7,8-HxCDD, 2,3,7,8-HpCDD, OCDD, 2,3,7,8-TCDF, 1,2,3,7,8-PeCDF, 2,3,4,7,8-PeCDF, 2,3,7,8-HxCDF, 2,3,7,8-HpCDF, OCDF. The analytical results shall be expressed both in terms of the concentrations of the individual compounds and in terms of the Toxic Equivalency Factors (TEFs) relative to 2,3,7,8-TCDD using the weighting factors in EPA/625/3-89/016, published March, 1989. The high resolution analytical procedure must be capable of detecting the individual compounds listed and measuring them in the low parts-per-trillion range. The low resolution analytical procedure need not be capable of detecting the individual compounds listed; a gross measurement of total dioxins/dibenzofurans is acceptable. The quarterly high-resolution analysis must be done on the same sample as the corresponding monthly low-resolution analysis to determine if the results can be correlated.
- 7/ Calculation of the % volatile solids reduction is to be based on comparison of a representative grab sample of total and volatile solids entering each digester and a representative grab sample of sludge solids exiting each digester withdrawal line.
- 8/ An inventory of compost as of December 15 of each year will be reported with the December Discharge Monitoring Report, and shall include all compost that has not been sold or otherwise transferred to a user as of that date, no matter where the compost is stored.
- 9/ Groundwater level data shall be presented both in tabular form and on a site map showing monitoring well locations and identification.
- 10/ In Section 307(a) of the 1987 Clean Water Act.

2. Reporting Procedures

Monitoring results shall be reported on approved forms. The reporting period is the calendar month. Reports must be submitted to the Department by the 15th day of the following month.

Monitoring reports (DMRs) shall include a record of the location, quantity and method of use of all sludge removed from the treatment facility and a record of all applicable equipment breakdowns and bypassing.

SCHEDULE C

Compliance Schedules and Conditions

1. By no later than 6 months after receipt of written notice from the Department, the permittee shall submit a sludge management plan or plan revision in accordance with Oregon Administrative Rule 340, Division 50, "Disposal of Sewage Treatment Plant Sludge and Sludge Derived Products Including Septage". Upon approval of the plan or plan revision by the Department, the plan shall be implemented by the permittee.
2. Bioassay.
  - a. No later than nine (9) months after permit issuance, the permittee shall submit proposed bioassay test procedures for the Department's review and approval. The proposal shall include at least the following:
    - (1) All bioassay tests must be conducted on 24-hour composite samples of the de-chlorinated final effluent diluted by appropriate control water.
    - (2) A chronic bioassay test conducted in 100%, 30%, 10%, 3%, and 1% of the final effluent and one control water sample using two species (one freshwater fish and one freshwater invertebrate) which are to be approved by the Department.
    - (3) An acute bioassay test conducted in 100 percent of the final effluent using the same two species as in the chronic bioassay test.
    - (4) A minimum of three replicates will be used in each of the tests.
  - b. Following agreement between the permittee and the Department on appropriate test procedures, the permittee shall initiate bioassay testing on Outfall 001 in accordance with Schedule B and the approved test procedures. Any change in bioassay test procedures must be approved by the Department.
  - c. The bioassay tests shall be conducted monthly between May and October, and once between November and April beginning in 1991, using the approved chronic and acute bioassay tests on the selected species. After 1991 and for the duration of the permit, testing shall be conducted monthly between May and October, and once between November and April, using the most sensitive test species approved by the Department.

3. By July 31, 1991, the permittee shall submit a written plan for evaluating the dispersion, mixing and dilution of effluent at Outfalls 001 and 002. The purpose of the study is to enable biomonitoring results on various effluent dilutions and effluent toxicity data to be related to actual mixing characteristics and available dilution. The evaluation shall also determine the ability of both outfalls to comply with the water quality standards for total chlorine residual (no more than 0.019 mg/l within the mixing zone and no more than 0.011 mg/l at the edge of the mixing zone).

Upon written approval of the Department, the plan shall be implemented and the results of the evaluation submitted to the Department by November 30, 1991. The plan and final submittal must comply with the following:

- a. The dispersion, mixing and dilution determinations should be carried out through preferably a dye study or through an approved verified mathematical model.
- b. Dispersion, mixing and dilution must be evaluated under the following combination of conditions:
  - i. Tidal conditions that result in minimal or no seaward river flow or other critical low receiving stream flows which may exist;
  - ii. River flow not exceeding the mean summer low flow; and
  - iii. At the average dry weather design flow for the facility, as listed in this permit, if sufficient storage is available in the system to simulate this condition. If sufficient storage is not available, perform at the highest flow rate that can be obtained from existing storage, and extrapolate the results to the average dry weather design flow.
- c. If the evaluation concludes that water quality standards cannot be met for total chlorine residual, the permittee shall include with the submittal of the evaluation:
  - i. A plan and time schedule for upgrading or modifying wastewater control facilities to achieve compliance with water quality standards for total chlorine residual.
  - ii. A proposed chlorine residual limitation to be inserted into the permit that assures compliance with water quality standards.

The Department will reopen this permit to include an appropriate total residual chlorine limit if necessary to achieve compliance with water quality standards.



In addition, the Department is currently proposing to adopt new rules regarding establishment of a Zone of Immediate Dilution (ZID). If and when these or similar rules are adopted, this permit may be reopened and conditions added to comply with those rules. The information provided by this study may be used to help establish any new conditions.

4. The permittee shall perform a Minimum Hydrogeologic Characterization and have completed Preliminary Groundwater Monitoring for the Triangle Lake Sludge Lagoon area according to the following schedule:
  - a. By January 1, 1992, submit to the Department approvable plans for Minimum Hydrogeologic Characterization and Preliminary Groundwater Monitoring. Upon approval of the Plans by the Department, the plans shall be implemented by the permittee.
  - b. By April 1, 1993, submit the results of the Minimum Characterization using a Department approved format, install the approved monitoring well system, and initiate the Preliminary Groundwater Monitoring program.
  - c. After initiating the Groundwater Monitoring Program, water samples from the designated monitoring wells shall be:
    - (1) Collected quarterly;
    - (2) Analyzed by a laboratory approved by the Oregon State Health Division for Drinking Water Analysis, except for the Priority Pollutants; and
    - (3) Reported to the Department with an analysis of the meaning of the results.
  - d. The need for permit-specific concentration limits and ongoing groundwater monitoring efforts shall be evaluated by the Department at the time of permit renewal. Any corrective actions and/or additional monitoring shall be incorporated into the proposed permit at that time. However, during the term of this permit, should the data suggest that a groundwater discharge poses a significant threat, the Department may request corrective action by modifying this permit.
5. The permittee shall sample groundwater at the compost storage site immediately east of and adjacent to the treatment plant, as described under Schedule B of this permit, utilizing the existing wells that were installed in October of 1988. If these wells are no longer usable, the permittee shall install three new wells (3 monitoring wells, one of which may be used as a piezometer) by December 1, 1991, after which the monitoring

requirements of Schedule B must be met. The Permittee shall notify the Department by July 31, 1991 whether the existing wells are usable or not. Groundwater monitoring at this location will be required until such time as the site is no longer used for compost storage, or until such time as an impervious surface with proper drainage control and leachate collection systems for compost storage is constructed.

In addition, by July 31, 1991, the permittee shall inform the Department of when it expects to cease using this site for compost storage. If this site is to be in use for compost storage after June 30, 1995, the compost must be stored on an impervious surface, and leachate collection and treatment systems must be provided.

6. The permittee shall prepare and submit an approvable facility plan to control CSO discharges. The facility plan shall include the following elements: 1) a characterization of the CSO discharges including volume, times discharge, and bacterial and chemical content (as listed in (a), below) of the discharges; 2) an evaluation of the impact on water quality from the existing discharges; 3) an evaluation of the minimum technology based limitations, and how they would be implemented for each CSO; 4) an evaluation of control measures required to eliminate any dry weather discharges; 5) an evaluation of other control measures that might be required to achieve compliance with water quality standards including separation of the sewer systems and treatment of each discharge point; 6) an analysis of the level of controls required to attain compliance with water quality standards; 7) a cost analysis of the control strategy required to attain continuous compliance with water quality standards; and 8) a proposed schedule for implementing recommended control measures. The permittee shall:
  - a. By December 31, 1992, submit the results of a study to characterize Combined Sewer Overflow (CSO) discharges. The study shall include:
    - (1) Development of a model or models to predict the quantity and quality of the CSO discharges under varying rainfall conditions (for the purpose of this condition, CSO discharges include discharges from CSOs and pump stations that overflow during normal operation/high influent flow conditions). The model(s) should be able to predict the volume, duration and quality of the discharge from individual CSOs, the combined discharge from all CSOs located on the Willamette River, and the combined discharges from all CSOs located on the Columbia Slough. The model(s) should also be able to predict the volume, duration and quality of discharges that could be achieved with the application of wastewater control and treatment technologies.

Water quality parameters to be modeled include, but are not limited to, carbonaceous BOD-5 (CBOD-5), Total Solids, Total Suspended Solids, Fecal Coliform and Enterococcus bacteria, Ammonia-nitrogen, plus those Metals (Ag, As, Cd, Cr, Cu, Hg, Ni, Pb and Zn) and Priority Pollutants listed in Section 307(a) of the 1987 Clean Water Act that are detected in samples at or above the water quality criteria levels listed in Oregon Administrative Rules Chapter 340, Division 41 or above the Department's proposed sediment guidelines.

- (2) Sufficient sampling to support the development of the models as well as to validate the applicability of the model(s) to all CSOs.
  - (3) Mixing zone evaluations on at least six (6) CSOs, four (4) on the Willamette River and two (2) on the Columbia Slough. The CSOs selected for the mixing zone studies must be such that the results of the mixing zone studies can be extrapolated to all CSOs in the system. The mixing zone studies must identify the smallest sized mixing zones such that State Water Quality standards are met at the edge of the mixing zones under all tidal conditions at summer mean low flow conditions. The permittee shall also develop a methodology for determining appropriate mixing zones for all CSOs in its system, based on the CSO characterization and mixing zone studies.
- b. By no later than December 1, 1994, submit a draft facilities plan; and
  - c. By no later than December 1, 1995, submit a final approvable facilities plan.
  - d. The permittee is required to meet the minimum technology based limitation specified by EPA, to eliminate all discharges during dry weather, and to meet Oregon's water quality standards. In the event that the above described facilities plan demonstrates that further control measures are required, the Department will negotiate a schedule for attaining compliance in a timely manner. This schedule will be incorporated into an administrative order.
7. By December 31, 1991, the permittee shall submit a list of all known locations in the sanitary/combined sewage collection system where raw sewage could be discharged directly to state waters, including, but not limited to CSOs and pump station bypasses. The list shall include the location and type of discharge point, the name of the receiving stream, and the circumstances under which a discharge may occur.

8. Columbia Slough Waste Load Allocations

- a. Within 12 months of the signing of this permit, the City of Portland shall submit a draft plan and time schedule to the Department describing how and when the City will modify its sewerage facilities to comply with the Waste Load Allocations identified in the Department's Total Maximum Daily Loads (TMDLs) for the Columbia Slough.
  - b. Within 18 months of the signing of this permit, the City of Portland shall submit a final plan and time schedule to the Department describing how and when the City will modify its sewerage facilities to comply with the Waste Load Allocations identified in the Department's TMDLs for the Columbia Slough.
  - c. The City of Portland shall enter into a Memorandum of Agreement with the Department of Environmental Quality which describes the Department's expectations and requirements of the TMDLs for pollutants of concern in the Columbia Slough. Any appropriate schedules may be modified by the Memorandum of Agreement. The time schedule for compliance conditions 7(a) and 7(b) in Schedule C of this permit may be modified by the Memorandum of Agreement. The Memorandum of Agreement will be incorporated into this permit by addendum.
9. By December 31, 1991, the permittee shall develop a public notification process to inform citizens of when and where untreated sewage discharges occur. The process shall be submitted in written form to the Department for approval. The process shall be implemented upon written approval from the Department. The process shall include:
- a. A mechanism to alert people using the Willamette River and Columbia Slough of the occurrence of untreated sewage discharges; and
  - b. A system to determine the extent and duration of conditions that are potentially unhealthful for users of the Willamette River and Columbia Slough due to untreated sewage discharges.
10. The permittee is expected to meet the compliance dates which have been established in this schedule. Either prior to or no later than 14 days following any lapsed compliance date, the permittee shall submit to the Department a notice of compliance or noncompliance with the established schedule. The Director may revise a schedule of compliance if he determines good and valid cause resulting from events over which the permittee has little or no control.

**SCHEDULE D**

**Special Conditions**

1. All sludge shall be managed in accordance with a sludge management plan approved by the Department of Environmental Quality. No substantial changes shall be made in sludge management activities which significantly differ from operations specified under the approved plan without the prior written approval of the Department.
2. The permittee shall implement the bioassay toxicity testing program specified in Schedules B and C of this permit.
  - a. If any acute bioassay test indicates that the effluent sample is toxic, another toxicity test using the same species and the same methodology shall be conducted within two weeks. If the second test also indicates toxicity, the permittee shall follow the procedure described in section (c) of this permit condition.
  - b. If a chronic bioassay test indicates that the effluent sample is toxic at the dilutions determined to occur at the edge of the mixing zone, or if there is no dilution data for the edge of the mixing zone and any chronic bioassay test indicates that the effluent is toxic, another toxicity test using the same species and the same methodology shall be conducted within two weeks. If the second test also indicates toxicity, the permittee shall follow the procedure described in section (c) of this permit condition.
  - c. If, after following the procedure as described in sections (a) or (b) of this permit condition, two consecutive bioassay test results indicate acute and/or chronic toxicity, the permittee shall evaluate the source of the toxicity and submit a plan and time schedule for achieving compliance with the water quality standards for toxicity. Upon approval by the Department, the permittee will implement the plan until compliance has been achieved. Evaluations shall be completed and plans submitted within 6 months.
3. The permittee shall comply with Oregon Administrative Rules (OAR) Chapter 340, Division 49, "Regulations Pertaining to Certification of Wastewater System Operator Personnel", including the following:
  - a. Have its wastewater collection system supervised by one or more operators certified at a grade level equal to or higher than the system classification shown on page 1 of this permit. The designated supervisor(s) shall be available to the system owner and any other operator of the facility.

- b. Have its wastewater treatment system supervised by one or more operators certified at a grade level equal to or higher than the system classification shown on page 1 of this permit. The supervisor(s) shall be available to the system owner and any other operator of the facility.
- c. When the designated supervisor(s) are not available, have an operator available who is certified no less than one grade level below the system classification. This condition applies to system owners who designate supervisors to be fully responsible for system operation in lieu of the designated supervisor (if any are designated by the permittee) and any temporary supervisor so designated by the permittee. A system shall not be without an individual certified at the classification of the system for more than 30 days.
- d. Notify the Department in writing within 30 days of replacement or redesignation of operators identified as responsible for supervising the operation of the wastewater systems.
- e. File with the Department at the time of permit renewal the name of the properly certified operator(s) designated the responsibility of supervising the operation of the wastewater treatment and collection systems.

**SCHEDULE E**

The permittee shall implement the following pretreatment activities:

1. The permittee shall conduct and enforce the industrial waste pretreatment program as approved by the Department and the General Pretreatment Regulations (40 CFR 403). The following shall be implemented or submitted by the permittee:
  - a. Enforce federal pretreatment regulations as promulgated by EPA or local limitations, whichever are more stringent. Locally derived limitations shall be defined as pretreatment standards under Section 307(d) of the Clean Water Act.
  - b. Issue wastewater discharge permits to all significant industrial users. These shall, at a minimum, contain limitations, sampling protocols, compliance schedule (if appropriate), and reporting requirements. Except as provided in 40 CFR, part 403.3(t)(2), A significant industrial user means:
    - (1) All industrial users subject to Categorical Pretreatment Standards under 40 CFR, part 403.6 and 40 CFR, Chapter I, Subchapter N; and
    - (2) Any other industrial user that
      - (i) Discharges an average of 25,000 gallons per day or more of process wastewater to the permittee's sewerage facility (excluding sanitary, noncontact cooling and boiler blowdown wastewater);
      - (ii) Contributes a process wastestream which makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the permittee's sewage treatment plant; or
      - (iii) Is designated as such by the Control Authority as defined in 40 CFR, part 403.12(a) on the basis that the industrial user has a reasonable potential for adversely affecting the permittee's operation or for violating any pretreatment standard or requirement (in accordance with 40 CFR, part 403.8(f)(6)).
  - c. As appropriate, update the industrial user survey. At a minimum, this shall include maintaining and updating records identifying the nature, character, and volume of pollutants contributed by significant industrial users. Records shall be maintained for a 3-year period.

- d. Carry out inspections and monitoring activities on significant industrial users to determine compliance with applicable pretreatment standards. Monitoring of significant industrial users shall be commensurate with the discharge but shall not be less than semi-annually.
  - e. Provide to the Department by March 1 of each year, a report (2 copies) that describes the permittee's pretreatment program activities over the previous calendar year. The content of this report shall be as established by the Department.
2. The permittee shall develop and maintain local limits to prevent interference, pass through of pollutants, and sludge contamination.
  3. Require accidental spill and prevention programs from industrial users having a history of, or possessing the potential for, accidental discharges or spills that could upset the treatment process or cause a violation of this NPDES permit.
  4. The permittee shall obtain timely and appropriate remedies for compliance by any industrial user who violates federal, state, or local pretreatment standards and requirements.
  5. The permittee shall perform at a minimum, on a semi-annual basis (wet and dry season), chemical analyses of its influent, effluent, and final sludge for specific toxic pollutants. The list of toxics, exact sampling frequency and protocol shall be as described by the Department in Schedule B of this NPDES permit.
  6. The permittee shall request and obtain approval from the Department before implementing any significant changes to the approved local pretreatment program.

P70725W (GRW) (3/4/91)



**DRAFT**

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NPDES WASTE DISCHARGE PERMIT EVALUATION  
March 28, 1991

Department of Environmental Quality  
811 Southwest Sixth Avenue, Portland, OR 97204  
Telephone: (503) 229-5696

PERMITTEE: Columbia Blvd. Sewage Treatment Plant  
5001 N. Columbia Blvd.  
Portland, Oregon

SOURCE CONTACT: City of Portland

Name  
Ross Peterson

Phone Number  
(503) 796-7740

REVIEWER: George Davis through Ed Woods

TO: Manager, Municipal Wastewater Section, Water Quality Division

PROPOSED ACTION: Renewal

SOURCE CATEGORY: Major Municipal

PERMIT APPLICATION DATE: February 9, 1989

PERMIT APPLICATION NUMBER: 998767

EPA REFERENCE NUMBER: OR002690-5

## Introduction

### Location

The Columbia Boulevard Sewage Treatment Plant (CBSTP) is located in Portland, Oregon at 5001 N. Columbia Blvd. The plant can be found from downtown Portland by travelling north on Interstate 5, taking the Columbia Blvd. exit, and turning west (right) on Columbia Blvd. The plant is approximately 1 to 1 and 1/2 miles west of the exit on the north side of Columbia Blvd.

### Service Area, Population Served, Significant Contributors

CBSTP serves most of the City of Portland, excluding a small area in southwest Portland served by the Tryon Creek STP. CBSTP also serves part of Milwaukie. The City took over operation of the treatment and collection system on Hayden Island in the Columbia River in 1988. The City operated the Hayden Island treatment plant until a force main and pumping facility could be constructed to convey flows to CBSTP, at which time the Hayden Island STP was closed down. The area and population served by this plant will be increasing significantly over the next 20 years as sewer service is extended to the presently unsewered Mid-Multnomah County area. Provision of sewer service in this area was mandated by the Environmental Quality Commission to abate a threat to groundwater.

The population served by the facility is currently estimated to be 425,000.

The City of Portland supports a large number of industries, more than any other city in the state, most of which discharge wastewater to the city sewer system. The City has implemented an Industrial Pretreatment Program approved by the Department.

## Facility Description

Information in this section is primarily from a facility plan prepared around 1987/88, a Combined Sewer Outfall Report, a Diversion Report, and information obtained by staff during inspections.

### Sewage Collection System

The collection system serving CBSTP is primarily under the control of the City of Portland, with the exception of areas outside the city, such as Milwaukie. The City has an on-going sewer maintenance program. Staff do not know the age of the collection system, but it varies from (probably) over 35 years in the older parts of the City to new in the Mid-Multnomah County area.

The collection system consists of approximately 60% combined and 40% separated sewers. There are 54 combined sewer overflows (CSOs), of which 12 are in the Columbia Slough, with the remainder in the Willamette River. Approximately 190 diversion structures are used to divert flow into the interceptors for conveyance to the treatment works; when flows exceed the capacity of the diversions, the excess flow is discharged from the CSOs.

The collection system has 78 pumping stations, of which 34 are equipped with bypasses to bypass raw sewage directly to the Willamette River in the event of pump station failures or excessive inflows. Failure of the Sullivan pump station and a resulting major bypass of sewage which the permittee failed to report in a timely manner resulted in the assessment of a civil penalty in 1988. Since that time, the City has made a significant effort to improve the reliability of the pump stations, and to provide for easier actuation of manual back-up systems in the event of failures. Despite these efforts, more failures occurred at the Sullivan pump station, and a civil penalty was assessed in 1990; at the same time, the City and Department entered into a Stipulation and Final Order that requires the City to upgrade the Ankeny and Sullivan pump stations.

#### Sewage Treatment Facility

CBSTP is an activated sludge secondary treatment plant. The treatment works consists of headworks, primary clarifiers, aeration basins for activated sludge treatment, secondary clarifiers and chlorination facilities. Solids handling includes a 45 acre unlined sludge lagoon, primary and secondary digesters, dewatering facilities and a composter. The dry weather design flow is 100 million gallons per day (MGD); the wet weather design flow is 300 MGD.

Flows entering the treatment works pass through four grit removal channels and bar screens. The grit removal channels have been a maintenance problem in that the channels fill with grit when the grit removal mechanisms fail; the channel must then be dewatered and manually shoveled out before operation can resume. Flow is measured by four Parschall flumes with sonic level meters; in-plant recycle flows are introduced after the flumes.

Flow is then directed to the primary clarifiers, where solids are allowed to float or sink. Floating solids are skimmed from the surface, and solids that sink are scraped off the bottom of the clarifier. These solids are known as primary sludge, and are sent to primary digesters for further treatment. CBSTP has eight uncovered, rectangular primary clarifiers with a design flow of 300 MGD.

Primary effluent from the primary clarifiers then passes into a primary effluent channel leading to the secondary treatment system

(aeration basins and secondary clarifiers). The primary effluent channel is equipped with a gate valve to divert primary effluent directly to the chlorination facilities in the event that flows exceed the hydraulic capacity of the secondary treatment system.

Secondary treatment, also known as activated sludge treatment, occurs in the secondary treatment system. This system consists of aeration basins in which microorganisms consume much of pollutant load remaining in the primary effluent, and secondary clarifiers which allow the microorganisms to settle out before the treated wastewater is discharged. The large mass of microorganisms in the secondary system are known as activated sludge. The secondary treatment system was originally rated for flows of 200 MGD, but due to design limitations in the secondary clarifiers, the actual capacity is approximately 100 to 120 MGD.

CBSTP has eight rectangular aeration basins, operated in parallel in complete mix mode, followed by eight rectangular secondary clarifiers. Aeration is provided by coarse-bubble diffusers, and aeration capacity is a limiting factor in the operation of the plant. Prior to 1988, the plant was operated with a large solids (activated sludge) inventory, as this was found to suppress the formation of filamentous bacteria. A high population of filamentous bacteria is detrimental to the treatment process. Maintaining a high solids inventory resulted in sludge blanket depths only slightly less than the full depth of the clarifiers; this resulted in solids carryover when the sweep arm mechanism swung out to sweep the corners of the rectangular clarifiers, and also limited the hydraulic capacity of the secondary system to about 86 MGD. Activated sludge settles out in the secondary clarifiers. Some of the activate sludge is returned to the aeration basin to maintain the microorganism population; this is known as Return Activated Sludge (RAS). Excess sludge is removed from the process and sent to a secondary digester for further treatment; this is known as Waste Activated Sludge (WAS).

In 1988, treatment plant staff began reducing the solids inventory to about one-third of the previous level in an effort to improve treatment and reduce solids carryover. This has resulted in an increased hydraulic capacity through the secondary clarifiers since solids carryover does not occur as easily as before. However, this mode of operation also makes the plant more susceptible to excessive filamentous bacteria growths, since the filamentous bacteria now have less competition for available food (i.e., a higher food to microorganism (F/M) ratio). Treatment plant staff feel that if aeration efficiency is improved, they will be able to maintain the low solids inventory and still control filamentous growth. Treatment plant staff are evaluating the possible installation of fine-bubble diffusers to improve aeration efficiency. Currently, filamentous growth is controlled by chlorine injection in the return activated sludge (RAS) line.

In October of 1989, a new RAS line was constructed. The new line will introduce RAS into the primary effluent channel. This modification was made to provide better RAS distribution among the aeration basins; the present system does not allow good control of this. The modification was accomplished by dewatering several primary clarifiers, and then ceasing to discharge while allowing the dewatered primaries to fill. This provided approximately four hours during which no flows occurred in the primary effluent channel, allowing the installation of the coupling for the new RAS line.

Chlorination of treated effluent is provided by two parallel chlorinator/injector assemblies. Treatment plant staff modified this system in October of 1989 to allow crossover of these systems. It is now possible to feed both injectors from both chlorinators, thus improving the staff's ability to provide disinfection in the event of equipment failures. The plant does not have chlorine contact chambers; chlorine contact time is provided in the outfall lines. If chlorine limits are set to prevent chlorine toxicity in the mixing zone of the plant outfalls, it is possible that dechlorination of the effluent will be necessary. This would likely require the construction of new facilities to provide adequate chlorine contact time and allow for subsequent dechlorination of the effluent before discharge.

Treated effluent is discharged to the Columbia River, and usually flows to the river by gravity through outfall 001, unless high flow and/or high river stage conditions make pumping necessary. If pumping is necessary, effluent is also discharged through outfall 002. Pumping is provided by five pumps. Outfall 001 terminates in the main channel of the Columbia River, between the Hayden Island and the north shore; outfall 002 terminates in the Columbia River, between the south shore and Hayden Island.

#### Sludge Treatment and Disposal

Primary and secondary sludges are digested in separate anaerobic digesters. Digested sludges can then be handled in two ways: by composting, or by storage in a 45 acre lagoon. At this time, all sludge produced in the operation of the plant is dewatered and fed into the composter. In the composter, sludge is mixed with sawdust and composted for 30 to 60 days. Compost is stockpiled on a 15 acre site adjacent to CBSTP to the east; from there it is hauled to a new bagging facility located in the southwest corner of the CBSTP site. Compost is marketed by North American Soils, Inc., a subsidiary of Taulman-Weiss, under contract to the City. The Department has concerns about possible groundwater impacts from the 15 acre storage site, and asked the City to install monitoring wells. Initial groundwater monitoring results indicate no adverse groundwater impact, but continued groundwater monitoring will be proposed in the new NPDES permit as well. The new compost bagging facility incorporates an impervious surface

and drainage controls. Site drainage is fed into the treatment works.

CBSTP also includes a 45 acre lagoon that has been used to store sludges for several years. The City is planning to land apply a large amount of this sludge to reduce the amount of sludge in the lagoon and allow use of the lagoon for further secondary sludge conditioning. In the summer and fall of 1989, the City was engaged in obtaining contractor services to haul lagoon sludge to an 8,000 acre site in Eastern Oregon, near Hermiston. The site was reviewed by Mark Ronayne of Water Quality Division, and was approved by Northwest Region with the agreement of the Eastern Region office. Northwest Region has oversight responsibility for the sludge hauling and land application activities.

Because the 45 acre lagoon is unlined, the Department also has groundwater concerns about it. An evaluation of groundwater and installation of monitoring wells will be proposed in the renewal permit.

#### History of the Treatment Works

CBSTP was the first major sewage treatment plant constructed by the City of Portland (the City now operates two sewage treatment facilities). The original CBSTP was constructed in 1952 at the present plant site. The plant provided primary treatment with no disinfection to average dry weather flows (ADWF) of 60 MGD and peak wet weather flows (PWWF) of 155 MGD. Sludge was treated by anaerobic digestion. Effluent chlorination was added in 1961.

The first major plant expansion was completed in 1969. The capacity of the primary treatment units was increased to 100 MGD ADWF and 300 MGD PWWF. Parschall flumes replaced the original venturi flumes. Two primary sludge gravity thickeners were added, and the facultative lagoon was also added at that time.

Secondary treatment was added in 1974, with plant capacity then identified as being 100 MGD ADWF, 200 MGD PWWF through the secondary system (this capacity was never actually achieved), and 300 MGD PWWF through the primary system. Major changes to the sludge handling systems were also made, including disc centrifuges for waste activated sludge (WAS) thickening, heat treatment for sludge conditioning, vacuum filters for sludge dewatering, side-stream treatment systems for odors and high-strength wastes, and chemical feed systems for sludge conditioning. Heat treatment of sludge was discontinued in 1975, and WAS was stabilized by aerobic digestion in Aeration Basins 7 and 8 until 1982.

A coarse grit removal system was added to the headworks in 1975, and a septage dumping station was also added at that time.

The sludge lagoon was enlarged in 1979. In 1981, sludge system modifications included restarting the vacuum filters and adding a dredge to the lagoon to allow recovery of digested sludge for vacuum filtration. Sludge cake was hauled to a landfill. In 1982, four new anaerobic digesters and a new gravity thickener were completed. Aerobic digestion of WAS was discontinued. The vacuum filters were replaced by belt filter presses, and disc centrifuging of WAS was discontinued at that time. WAS is now thickened by gravity after the addition of polymer. In 1985, the composter was placed in service.

#### Major Facility Improvements, Upgrades or Modifications

The only major facility upgrade that has occurred during the last permit period was the construction of a composter that is used to compost digested sludges with sawdust to produce a marketable compost product. The composter was designed and installed by Taulman-Weiss, Inc., and the compost product is marketed by their marketing subsidiary, North American Soils.

Preliminary facilities planning work has begun for planned expansion to allow treatment of the addition waste load that will result from sewerage the mid-county area.

#### Unique Operating Conditions or Problems

Because a large portion of the collection system (60%) is combined sewers, wet weather flows are directly affected by rainfall. During wet weather, the capacity of the secondary portion of the plant is often exceeded, with the result that part of the influent flow receives only primary treatment.

The combined sewer system also results in the discharge of raw sewage to the Willamette River and Columbia Slough during wet weather through Combined Sewer Outfalls.

An area of continuing concern will be the reliability of the pump stations that are equipped with bypasses to the river.

#### Outfall Location

CBSTP has two outfall lines approximately two miles long, both of which run northwest from the plant toward the Columbia River. Outfall 001 crosses the Oregon Slough (between Hayden Island and the south shore of the Columbia River), crosses Hayden Island, and terminates in the main channel of the Columbia River. Outfall 002 parallels 001, but terminates in Oregon Slough. Outfall 002 is only used if 001 cannot handle the total effluent flow, or if problems or maintenance activities prevent use of 001. Both outfalls are unexposed, being buried and/or submerged for their entire lengths.

## Compliance History

### Schedule A, Limitations

Self-monitoring data submitted by the permittee was reviewed for the period of April, 1988 through October, 1989. Compliance history for that period is tabulated and summarized below.

Date Mo-Yr	BOD		TSS		Percent Removal		Fecal Coliform		Flow, MGD		
	Mon Avg	Wk Avg	Mon Avg	Wk Avg	BOD	TSS	Mon Avg	Wk Avg	Mon Avg	Daily Max	Min
limits	30	45	30	45	-	-	200	400	100*	-	-
4-88	24	28	26	32	<u>82</u>	<u>80</u>	18	63	79.8	na	na
5-88	24	30	22	29	<u>84</u>	<u>83</u>	6	11	72.3	na	na
6-88	27	30	23	30	85	85	62	324	64.3	na	na
7-88	19	25	15	20	89	90	38	232	57.4	na	na
8-88	25	29	14	20	88	92	136	239	56.5	na	na
9-88	26	32	22	37	86	87	89	141	60.0	na	na
10-88	26	33	19	24	87	89	52	90	56.3	na	na
11-88	22	32	23	28	<u>83</u>	<u>80</u>	72	256	88.5	na	na
12-88	17	26	21	31	<u>89</u>	<u>85</u>	67	87	71.8	na	na
1-89	19	22	21	24	87	<u>84</u>	10	21	84.9	na	na
2-89	17	38	21	31	88	<u>84</u>	10	19	77.4	na	na
3-89	16	(40)	24	(56)	88	<u>82</u>	11	50	100.0	199.0	38.0
4-89	15	19	15	17	91	88	20	36	70.8	183.5	32.6
5-89	17	19	19	22	90	87	26	127	66.6	186.4	32.3
6-89	16	19	18	21	92	89	42	109	62.9	166.6	33.7
7-89	17	40	18	40	90	89	71	244	58.9	178.8	32.5
8-89	16	24	15	24	90	92	67	<467>	60.8	218.0	34.0
9-89	11	15	22	33	94	89	101	168	61.9	201.4	30.1
10-89	22	29	17	32	87	91	21	52	64.3	183.4	30.4
11-89	20	24	20	25	88	89	12	21	70.8	199.1	32.7
12-89	25	32	27	39	<u>84</u>	<u>82</u>	6	11	70.2	206.7	26.2
1-90	24	34	28	36	<u>82</u>	<u>77</u>	5	6	92.2	228.1	36.9
2-90	19	28	19	27	85	<u>84</u>	5	12	92.7	199.6	39.1
3-90	18	22	17	25	87	88	3	5	71.9	181.6	36.7
4-90	22	28	23	30	85	<u>84</u>	3	6	69.5	182.6	32.5
5-90	23	35	28	<48>	85	<u>82</u>	26	47	67.8	174.0	33.7
6-90	21	24	16	25	88	89	77	331	65.8	184.0	31.1
7-90	22	30	16	20	88	91	39	71	59.2	165.3	32.7
8-90	28	38	22	28	85	88	60	69	61.9	179.7	27.1
9-90	23	32	17	25	88	91	145	212	60.1	164.0	32.0

notes:

\* -this is not really a limit, but is a design/permit parameter

na -not available

() -daily maximum values, weekly averages not computed

<> -permit limit violation



1. BOD and TSS: During the review period, no violations of BOD limits occurred. One violation of the weekly TSS limit was reported in May, 1990.
2. 85% removal of BOD and TSS: 85% removal efficiency was not a permit requirement during the review period; however, reporting of removal efficiency was required. During the review period, 85% removal of BOD and TSS has generally been achieved. The values are underlined each time 85% removal was not achieved. Note that these occurred during wetter months, and the reduced removal efficiency is probably due to storm water inflows to the sewer system, along with part of the plant inflow receiving only primary treatment plus chlorination.
3. Fecal coliform: During the review period, one weekly fecal coliform violation occurred, in August of 1989. Effluent chlorine residual was maintained in the range of 0.7 to 1.3 mg/l during the period of violation. Treatment plant staff were unable to explain why the violation occurred.
4. Flow: Beginning in March 1989, daily instantaneous maximum and minimum flow rates have been reported.

#### Schedule B, Monitoring/Reporting Requirements

The permittee is carrying out all required self-monitoring. However, some problems have been noted with regard to reporting of the data. Quarterly Dissolved Substance monitoring reports have not been submitted consistently, and in a few instances the minimum percent removal efficiencies have been reported, instead of the average percent removal efficiencies as required. A Notice of Noncompliance was sent on December 14, 1989, requesting that reporting procedures be reviewed; the problems were resolved.

Sampling carried out by the permittee is representative of total inflows and outflows, and sampling locations are considered appropriate. Explanations of sampling results showing violations are included with monthly reports.

#### Schedule C, Compliance Conditions and Schedules

The current permit (issued on Sept. 14, 1984) contains two Compliance Conditions.

The first compliance condition states:

The permittee shall continue to work toward the separation of sanitary sewage and storm water in presently developed areas in which this method is cost effective. The permittee shall also maintain an ongoing program to reduce infiltration and inflow. A

progress report on these programs shall be submitted in October of each year.

It is staff's understanding that the City is not actively working toward separation of the entire sewer system, apparently on the basis that it is not considered cost effective. If the Department wants the City to separate the sewer system, a stronger approach is needed, along with adoption of rules or policies stating that sewer separation is required. An annual report on sewer maintenance activities is submitted each year.

The second compliance condition is an early version of the industrial waste pretreatment requirement, and was superceded on September 29, 1987 when Schedule E, Pretreatment Requirements, was added to the permit.

#### Schedule D, Special Conditions

The current permit does not contain Special Conditions.

#### Inspection Report Findings

The facility has been found in compliance during inspections conducted in 1989 and 1990. Earlier inspection results were not reviewed.

#### Enforcement Actions

In June of 1987, a civil penalty was assessed for failing to report a spill of raw sewage from a pump station in a timely manner. The permittee has responded by improving their reporting procedure, as well as their maintenance and operations of the pump stations.

A Notice of Noncompliance was sent on December 14, 1989 for violations of the reporting requirements in the NPDES permit (as noted above).

A civil penalty was assessed in approximately April of 1990 for the non-permitted discharge of raw sewage from the Sullivan Pump Station.

Stipulation and Final Order WQ-NWR-90-90 was signed in May, 1990, requiring upgrades to the Ankeny and Sullivan pump stations.

A Notice of Noncompliance was sent for the weekly TSS limit violation in May, 1990.

A Notice of Noncompliance was sent in October, 1990, for failure of the plant chlorination facility. The fecal coliform limit was not violated.

## Raw Sewage Bypassing

As defined by 40 CFR 122.41(m):

Bypassing of raw sewage at the treatment works does not occur. As noted in the treatment works description, when flows exceed the hydraulic capacity of the secondary treatment system, excess flows are diverted around the secondary system. All influent flows received primary treatment prior to secondary treatment and/or chlorination and discharge.

Bypassing of raw sewage does occur from the combined sewer overflows (CSOs) in the collection system. See the description of the collection system, above.

## Permit Conditions

### Sources Covered by the Permit

The current permit lists only Outfalls 001 and 002, the treatment plant outfalls. In accordance with the Federal Combined Sewer Overflow (CSO) Strategy and the CSO strategy being pursued by Oregon, all CSO discharge points have been listed in the proposed permit. In addition, two pump stations that are unable to pump the maximum wet-weather flows that come into them and must bypass the excess, have also been listed, since these pump stations are also, in effect, CSO discharge points.

### Treatment and Collection System Classes

The treatment and collection systems are both class IV for operator certification purposes.

### Schedule A, Waste Discharge Limitations

Dry weather design flow for the facility is 100 MGD.

#### 1. BOD and TSS limitations:

Current permit discharge limits for BOD and TSS are 30 mg/l each on a monthly average basis; these limits are in effect year-round. Concentration and loading limits based on 30 mg/l and a design flow of 100 MGD are:

30 mg/l monthly average; 45 mg/l weekly average;  
25,000 lbs/day monthly average; 37,500 lbs/day weekly average;  
50,000 lbs/day daily maximum.

In addition, to account for excessive flows generated primarily as a result of storm water inflows to the combined sewer system, the loading limits are increased to 50,000 lbs/day monthly average, 75,000 lbs/day weekly average, and 100,000 lbs/day daily maximum when influent flows to the treatment facility exceed 100 MGD.

OAR 340-41-455, Minimum Design Criteria for Treatment and Control of Wastes (Willamette Basin), part (1)(e) requires that facilities provide waste treatment to meet the following limits on a monthly average basis:

May 1 - Oct 31, 20 mg/l for BOD and TSS

Nov 1 - Apr 30, meet secondary treatment standards.

Secondary treatment standards are 30 mg/l for the Columbia Blvd. STP.

OAR 340-41-120, Implementation Program Applicable to All Basins, part (c) states: Wherever minimum design criteria for waste treatment and control facilities set forth in this plan are more

stringent than applicable federal stands and treatment levels currently being provided, upgrading to the more stringent requirements will be deferred until it is necessary to expand or otherwise modify or replace the existing treatment facilities. Such deferral will be acknowledged in the permit for the source.

Based on OAR 340-41-120, cited above, no changes are proposed to the existing permit limits.

2. Percent removal for BOD and TSS

The current permit does not incorporate percent removal limits for BOD and TSS.

40 CFR 133.102, concerning secondary treatment standards, parts (a)(3) and (b)(3) require that the 30-day average percent removal for BOD and TSS, respectively, shall not be less than 85 percent.

40 CFR 133.103, Special Considerations, part (a) Combined Sewers, states: Treatment works subject to this part may not be capable of meeting the percentage removal requirements established under (sections 133.102 (a)(3) and 133.102 (b)(3), cited above) during wet weather where the treatment works receive flows from combined sewers (i.e., sewers which are designed to transport both storm water and sanitary sewage). For such treatment works, the decision must be made on a case-by-case basis as to whether any attainable percentage removal level can be defined, and if so, what the level should be.

Reported percent removal efficiencies for BOD and TSS during the periods Nov. 1 through April 30 for 1988/89, 1989/90 and 1989/90, are:

	<u>1988/89</u>
BOD:	83, 89, 87, 88, 88, 91
TSS:	80, 85, 84, 84, 82, 88
	<u>1988/89</u>
BOD:	88, 84, 82, 85, 87, 85
TSS:	89, 82, 77, 84, 88, 84
	<u>1989/90</u>
BOD:	88, 84, 82, 85, 87, 85
TSS:	89, 82, 77, 84, 88, 84

Note that for the 18 months data listed, the percent removal for BOD was less than 85 in 5 months (28 percent of the time) but was never less than 80 percent; the percent removal for TSS was less than 85 in 12 months (67 percent of the time) and was less than 80 in two months with 77 percent removal reported.

The last three wet weather seasons are considered representative of current plant operations, and are further considered representative of optimal operations of the treatment facility. This statement is made on the basis of operational improvements

over the last two years that have been noted by the Department inspector. Specifically, the improvements that have been noted are with regard to the aeration basins and secondary clarifiers which comprise the secondary treatment portion of the facility.

The secondary portion of the facility is hydraulically limited and is unable to treat the maximum flows received by the facility. When the hydraulic limit is reached, a portion of the flow to the facility must be diverted around the secondary portion to prevent washout of biological solids; if washout were not prevented, the loss of biological solids would likely result in an extended period of upset and noncompliance following the washout.

When this writer first became inspector for this facility (1987), the operational hydraulic limit on the secondary portion of the facility was approximately 80 to 85 MGD (instantaneous flow rate). In the last two years, operational changes have resulted in an increase of the hydraulic limit to approximately 120 MGD (instantaneous flow rate), thus providing secondary treatment capability for a greater portion of the total plant influent flow. Clearly, improvements have been made, but it is unlikely that further improvements can be made in this area without significant improvements or additions to the facilities themselves.

In conclusion, it appears that the facility cannot meet the 85 percent removal requirement during wet weather months even when operated as efficiently as practicable. However, it appears that the facility is able to meet 80 percent removal for BOD and 75 percent removal for TSS during the wet weather period. Thus, the following percent removal limits are proposed:

For the period May 1 - Oct 31, percent removal on a monthly average basis shall not be less than:

85 percent for BOD

85 percent for TSS.

For the period Nov 1 - Apr 30, percent removal on a monthly average basis shall not be less than:

80 percent for BOD

75 percent for TSS.

### 3. Fecal Coliform:

The current permit limits are 200/100 ml monthly log mean and 400/100 ml weekly log mean. The basin standards (OAR 340-41-455(2)(e)(C)(i) are: 200/100 ml log mean over a 30-day period, with no more than 10 percent of the samples exceeding 400/100 ml.

The current permit limits are considered protective of the standards and no changes are proposed.

4. Mixing zone:

- a. Treatment plant outfalls - The current permit specifies that the mixing zone consists of a 100 foot radius from the point of discharge.

A mixing zone survey has not been conducted to determine if the current mixing zone is appropriately sized; a Compliance Condition has been proposed that requires the permittee to evaluate the mixing zone and determine the dilutions available within it (see Schedule C discussion).

Initially, the mixing zone size will be a 100 foot radius; however, in view of the multiple discharge points now listed in the permit, the proposed permit specifies the sizes of the mixing zones (plural).

- b. CSOs - The Department currently has no information on which to base the size of the mixing zones for the CSOs, so a 100 foot radius has been set as the initial size. A Compliance Condition has been proposed, part of which is to determine the appropriate sizes for the CSO mixing zones (see Schedule C discussion).

5. Chlorine residual:

The current permit does not contain a chlorine residual limit.

Department staff have discussed the treatment plant's ability to adequately disinfect effluent while meeting a 1.0 mg/l chlorine residual limit. City staff have stated that limiting the chlorine residual to 1.0 mg/l has resulted in violations of the fecal coliform limits in the permit; however, the City feels that it can adequately disinfect while maintaining a chlorine residual of 1.5 mg/l. Therefore, the Department is proposing to establish an initial chlorine residual limit of 1.5 mg/l in the permit.

Because of concerns about chlorine toxicity, a Compliance Condition (see Schedule C discussion) has been proposed that requires a study to determine a chlorine residual limit that provides disinfection to meet the fecal coliform limits without creating acute toxicity within the mixing zone (outside some as yet undefined zone of initial dilution), or chronic toxicity at the edge of the mixing zone. The Department and City both recognize that it may be necessary for the City to construct additional treatment units to achieve adequate disinfection and meet a lower chlorine residual limit.

## Schedule B, Monitoring and Reporting

1. a. Influent - The current permit requires monitoring for BOD, TSS, pH, chlorine residual and flow. The proposed permit will require these plus flow meter calibration and monitoring for toxics (Ag, As, Cd, Cr, Cu, Hg, Ni, Pb, Zn, cyanide and total phenols). Dioxin and Thorium 232 have also been detected in sludges from the treatment plant, so these will also be monitored.
- b. Effluent - The current permit requires monitoring for BOD, TSS, pH, fecal coliform, flow, and Dissolve Chemical Substances (several metals, cyanide and phenols). The proposed permit will require monitoring for BOD, TSS, pH, fecal coliform, chlorine residual, flow, nutrients (NH<sub>3</sub>, NO<sub>2</sub>, NO<sub>3</sub>, TKN and total phosphate), toxics (Ag, As, Cd, Cr, Cu, Hg, Ni, Pb, Zn, cyanide and total phenols), toxics removal, and biomonitoring. Dioxin and Thorium 232 have also been detected in sludges from the treatment plant, so these will also be monitored.

The Columbia Blvd. treatment plant is not equipped with an effluent flow meter. Only influent flows will be reported.

Biomonitoring is being required of most or all municipal wastewater treatment facilities, with the frequency of testing based on consideration of the size of the facility, whether it has a pretreatment program, and its annual sludge production. This facility falls into a category (category A, see Table 1) that requires monthly bioassays between May 1 and October 31, and one bioassay between November 1 and April 30.

Monitoring of discharges from Outfall 002 is not required for the following reasons:

- Outfall 002 will normally only be used when effluent flows exceed the capacity of Outfall 001; in this case, samples taken from 001 will be representative of the total effluent flow.
- The sampling point for 001 is located on Hayden Island, near the end of the outfall line. 002 is not equipped with a sampling point.
- Outfall 002 will normally not be used alone, except when maintenance requirements prevent the use of 001. Permit Schedule A includes a requirement that use of 002 be minimized.

c. Sludge - The current permit requires quarterly monitoring for sludge solids, nitrogen content, and five metals (Cd, Cu, Pb, Ni, and Zn). The proposed permit requires monthly monitoring for sludge solids, volatile solids, suspended solids, nitrogen content, metals content for nine metals (Ag,



As, Cd, Cr, Cu, Hg, Ni, Pb, Zn), phosphorus, potassium and pH. In addition, the permittee must determine the percent volatile solids reduction through the digestion process, and record the locations where sludge is land applied. Dioxin and Thorium 232 have also been detected in sludges from the treatment plant, so these will also be monitored.

Because of the operation of a composter at this facility, the permittee must also report the amount of compost produced monthly, and determine the compost inventory on an annual basis.

The City of Portland manages sludge in one of three ways, and the monitoring requirements have been written with these in mind:

- i. Digested sludge can be belt-pressed and fed into the composter. Sludge can be delivered to the belt presses either directly from the anaerobic digesters, or from the Triangle Lake Sludge Storage Lagoon, or a combination of these.
- ii. Digested sludge can be belt-pressed and shipped off-site for land application. Again, sludge can be delivered to the belt-presses either from the digesters, the lagoon, or a combination.
- iii. Digested sludge can be removed from the storage lagoon and shipped off-site for land application.

In cases (i) and (ii), above, the appropriate sampling point is at the belt presses, since this represents the final sludge product before composting or land application.

In case (iii), above, the sludge in the lagoon should be directly sampled before land application. The City is currently engaged in a large land application project, and has extensively sampled and characterized the sludge in the lagoon. At this time, no further sampling of lagoon sludge is needed.

Accordingly, the permit only specifies sampling of the final belt-pressed sludge product.

d. Groundwater (Compost storage area and Triangle Lake sludge storage lagoon) - Two areas are of concern with regard to groundwater: the sludge storage lagoon (known as Triangle Lake), and the compost storage area immediately east of and adjacent to the treatment plant. Section (d) requires quarterly monitoring of groundwater from the compost storage area. A preliminary groundwater characterization has already been completed (1988) and three monitoring wells installed.

This section also requires groundwater monitoring in the area of the sludge lagoon after completion of a preliminary groundwater characterization and the installation of monitoring wells.

### Schedule C, Compliance Schedules and Conditions

1. This item requires the submission of a sludge management plan or plan revision within six months of receipt of a written notice from the Department. Portland currently has an approved sludge management plan.

2. This item requires submission of proposed bioassay test procedures, specifies certain testing conditions, specifies that for the first year two test species must be used, and that thereafter a single species agreed to by the Department shall be used. The testing frequency is as specified in Schedule B.

3. This item requires the permittee to evaluate the dispersion, mixing and dilution of effluent in the mixing zones for Outfalls 001 and 002, and also to determine the ability to comply with chlorine residual standards within the mixing zones. This item also states that the Department will impose a lower chlorine residual limit if necessary to prevent chlorine toxicity within or at the edge of the mixing zone.

The Columbia River is affected by tidal action up to Bonneville Dam. This condition specifies that the evaluation must be made under conditions of minimal flow.

4. This item requires a Minimum Hydrogeologic Characterization and Preliminary Groundwater Monitoring for the Triangle Lake Sludge Lagoon.

5. This item requires monitoring of groundwater at the compost storage area east of and adjacent to the treatment plant using the existing monitoring wells. It also requires the installation of three new wells should the existing wells be no longer usable.

This item also notes that compost stored on this site after June 30, 1995 must be on an impervious surface equipped with leachate collection and treatment systems.

6. The permittee is required to develop a facility plan for Combined Sewer Overflows that evaluates treatment and control technologies needed to meet water quality standards, including time schedules for implementation.

This item also requires the permittee to conduct a study to characterize the discharges from Combined Sewer Overflows (CSOs), to conduct mixing zone studies on CSOs and to determine a method

for determining the appropriate sizes of the CSO mixing zones. The permittee must develop a model or models that will allow evaluation of water quality impacts under current conditions as well as what the impacts would be after applying various controls to reduce discharges.

7. This item requires the permittee to submit a list of all points in the collection system that could discharge sewage to public waters.

8. This item requires the permittee to submit a plan and time schedule for modification to its sewerage facilities in order to meet the Waste Load Allocations/Total Maximum Daily Loads that the Department will set on the Columbia Slough. This item further requires the permittee to enter into a Memorandum of Agreement with the Department; the Memorandum of Agreement will be added to the permit by addendum.

The Columbia Slough is considered to be Water Quality Limited for fecal coliform bacteria, and the discharges from the Combined Sewer Overflows are thought to be significant contributors to the exceedance of the water quality bacterial standard.

9. This item requires the permittee to develop a process for notifying the public when sewage discharges occur. Upon approval of the process by the Department, the process must be implemented.

10. This item requires the permittee to meet the compliance dates that have been established in the permit.

#### Schedule D, Special Conditions

1. This item requires the permittee to manage sludge in accordance with an approved sludge management plan.

2. This item requires the permittee to implement a bioassay testing program as specified in Schedules B and C, and requires that another test be performed within two weeks if any test indicates toxicity. This condition further states that if both tests indicate toxicity in the effluent, then the permittee must develop and implement a plan to reduce the toxicity.

3. This item requires the permittee to meet the requirements of OAR Chapter 340, Division 49, "Regulations Pertaining to Certification of Wastewater System Operator Personnel".

#### Schedule E

1. This item requires the permittee to conduct and enforce an industrial waste pretreatment program as approved by the Department and the General Pretreatment Regulations (40 CFR 403).

Table 1.

Table of Treatment Facility Categories and Required Monitoring for Chlorine, Ammonia, Metals, and Bioassays

Dry Weather Design Flow (Q, mgd)	Sludge Production (S, dry tons/year)	Pretreatment Program (CI, categorical industries)	Category
$Q > 10$	$S > 1000$	Yes: CI > 5	A
$10 \geq Q > 5$	$1000 \geq S > 500$	Yes: $5 \geq CI$	B
$5 \geq Q > 2$	$500 \geq S > 200$	Yes: CI = 0	C
$2 \geq Q$	$200 \geq S$	No Program	D

Chlorine, Ammonia, and Metals Monitoring Requirements, by Category

Category	Chlorine	Ammonia*	Metals
A	Daily	Weekly (May - Oct.)	Monthly: Cd, Cu, Ni, Pb, Zn, Ag, As, Cr, Hg
B	Daily	Semi-Monthly (May - Oct.)	Bi-monthly: Cd, Cu, Ni, Pb, Zn, Ag, As, Cr, Hg
C	Daily	Monthly (May - Oct.)	Semi-annual: Cd, Cu, Ni, Pb, Zn, (Aug. & Feb.) Ag, As, Cr, Hg
D	Daily	Bi-Monthly (May - Oct.)	Annual: Cd, Cu, Ni, Pb, Zn (Aug.)

\* Ammonia monitoring may be required more frequently to assess ammonia loading for TMDL, basin planning purposes, or to assess BOD-5 vs. CBOD-5 + ammonia relationship.

Bioassay Requirements, by Category

Category	Bioassay Testing Frequency
A	Monthly, May - Oct.; One test, Nov. - Apr.
B	Every other month, May - Oct.; One test, Nov. - Apr.
C	Semi-annual, Aug. and Feb.
D	DEQ screening test; annual test in Aug. in 2nd and 4th year

(NOTE: The Columbia Blvd. STP is in category A.)

1                               BEFORE THE ENVIRONMENTAL QUALITY COMMISSION

2   OF THE STATE OF OREGON

3 DEPARTMENT OF ENVIRONMENTAL QUALITY, ) STIPULATION AND FINAL ORDER  
4 OF THE STATE OF OREGON, ) No. WQ-NWR-91-75  
5 Department, ) MULTNOMAH COUNTY  
6 v. )  
7 CITY OF PORTLAND, )  
8 Respondent. )

9   WHEREAS:

10               1. On \_\_\_\_\_, 1991, the Department of Environmental  
11 Quality (Department or DEQ) issued National Pollution Discharge  
12 Elimination System (NPDES) Waste Discharge Permit Number 3881-J  
13 (Permit) to the City of Portland (Respondent), pursuant to Oregon  
14 Revised Statutes (ORS) 468.740 and the Federal water Pollution  
15 Control Act Amendments of 1972, P.L. 92-500. The Permit authorizes  
16 the Respondent to construct, install, modify or operate waste water  
17 treatment control and disposal facilities (facilities) and discharge  
18 adequately treated waste waters into the Columbia River and  
19 Willamette River, waters of the state, in conformance with the  
20 requirements, limitations and conditions set forth in the Permit.  
21 The Permit expires on \_\_\_\_\_, 1996.

22               2. Respondent's sewage collection system is comprised in part  
23 of combined sewers designed to collect both sanitary sewage and  
24 storm runoff water. The combined sewer system is designed and  
25 intended to collect and transport all sanitary sewage to  
26 Respondent's sewage treatment plant during periods of dry weather;

1 however, during some periods of wet weather, the combined sanitary  
2 sewage and storm runoff entering the system exceeds the system's  
3 capacity to collect and transport sewage to the sewage treatment  
4 plant. At such times, the excess combined sanitary sewage and storm  
5 runoff are discharged through Combined Sewer Overflows directly to  
6 the Willamette River and Columbia Slough, waters of the state,  
7 without treatment. Respondent's system includes 54 Combined Sewer  
8 Overflows. In addition, Respondent owns and operates sewage pump  
9 stations, two of which, the Ankeny Pump Station and the Sullivan  
10 Pump Station, may not be capable of pumping all incoming combined  
11 sanitary sewage and storm runoff during periods of wet weather. At  
12 such times, combined sanitary sewage and storm runoff are discharged  
13 from the Ankeny and Sullivan Pump Stations directly to the  
14 Willamette River without treatment. The discharges of combined  
15 sanitary sewage and storm runoff from the Combined Sewer Overflows  
16 and the Ankeny and Sullivan Pump Stations (Discharges) may cause  
17 violations of Oregon's water quality standards for Fecal Coliform  
18 bacteria and possibly other parameters in the Columbia Slough and  
19 the Willamette River.

20 3. Since the adoption of water quality standards for the  
21 Willamette Basin (included in Oregon Administrative Rules 340-41-  
22 445) by the Environmental Quality Commission in 1976, Respondent has  
23 discharged combined sanitary sewage and storm runoff and may have  
24 caused violations of water quality standards.

25 4. DEQ and the Respondent recognize that until new or  
26 modified facilities are constructed and put into full operation,

1 Respondent may cause violations of the water quality standards at  
2 times.

3 5. Respondent presently is conducting or preparing to conduct  
4 studies and facilities planning in order to determine the quantity  
5 and quality of combined sanitary sewage and storm runoff discharged  
6 from its sewage system, and to determine appropriate methods and  
7 time schedules to eliminate violations of water quality standards.

8 6. The Department and Respondent recognize that the  
9 Environmental Quality Commission (Commission) has the power to  
10 impose a civil penalty and to issue an abatement order for  
11 violations of water quality standards. Therefore, pursuant to ORS  
12 183.415(5), the Department and Respondent wish to settle those  
13 possible past violations referred to in Paragraph 3 and to limit and  
14 resolve the future violations referred to in Paragraph 4 in advance  
15 by this Stipulation and Final Order.

16 7. This Stipulation and Final Order is not intended to limit,  
17 in any way, the Department's right to proceed against Respondent in  
18 any forum for any past or future violations not expressly settled  
19 herein.

20  
21 NOW THEREFORE, it is stipulated and agreed that:

22 8. The Commission hereby issues a final order:

23 a. Requiring the Respondent to eliminate all  
24 Discharges that violate water quality standards from November 1  
25 through April 30 except during storms greater than or equal to a  
26 storm with a five year return frequency and to eliminate all

1 Discharges that violate water quality standards from May 1 through  
2 October 31 except during storms greater than or equal to a storm  
3 with a twenty-five year return frequency, in accordance with the  
4 following schedule:

5 (1) By no later than December 31, 1992, the  
6 Respondent shall submit the results of a study to characterize  
7 Combined Sewer Overflows, as described in the Respondent's Permit;

8 (2) By no later than December 31, 1992, the  
9 Respondent shall submit a plan including a schedule for Phase 1 and  
10 Phase 2 interim control methods to be used to minimize water quality  
11 violations until such time as final compliance is attained;

12 (3) By no later than October 1, 1994, the  
13 Respondent shall implement Phase 1 interim control methods as  
14 agreed to by the Respondent and the Department;

15 (4) By no later than December 1, 1994, the  
16 Respondent shall submit a draft facilities plan to the Department,  
17 as described in Respondent's Permit;

18 (5) By no later than December 1, 1995, the  
19 Respondent shall submit to the Department a final approvable  
20 facilities plan;

21 (6) By no later than October 1, 1996, the  
22 Respondent shall remove all large solids and floatables from  
23 discharges to the Columbia Slough;

24 (7) By no later than December 1, 1997, the  
25 Respondent shall submit final engineering plans and specifications  
26 for construction work required to comply with Section 8(a)(10);



1 (8) By no later than December 1, 1997, the  
2 Respondent shall implement Phase 2 interim control methods as agreed  
3 to by the Respondent and the Department;

4 (9) By no later than May 1, 1998, the Respondent  
5 shall begin construction required to comply with Section 8(a)(10);

6 (10) By no later than December 1, 2001, the  
7 Respondent shall eliminate discharges that violate water quality  
8 standards, subject to the storm return frequencies specified in  
9 Paragraph 8a of this Order, at 20 of the CSO discharge points,  
10 including all discharges to Columbia Slough, consistent with the  
11 facilities plan approved by the Department;

12 (11) By no later than December 1, 2001 the  
13 Respondent shall submit final engineering plans and specifications  
14 for construction work required to comply with Section 8(a)(13);

15 (12) By no later than May 1, 2003 the Respondent  
16 shall begin construction required to comply with Section 8(a)(13);

17 (13) By no later than December 1, 2006 the  
18 respondent shall eliminate discharges that violate water quality  
19 standards, subject to the storm return frequencies specified in  
20 Paragraph 8a of this Order, at 16 of the remaining CSO discharge  
21 points, consistent with the facilities plan approved by the  
22 Department;

23 (14) By no later than December 1, 2006 the  
24 Respondent shall submit engineering plans and specifications for  
25 construction work required to comply with Section 8(a)(16);  
26

1 (15) By no later than May 1, 2008, the Respondent  
2 shall begin construction required to comply with Section 8(a)(16);

3 (16) By no later than December 1, 2011, the  
4 Respondent shall eliminate discharges that violate water quality  
5 standards, subject to the storm return frequencies specified in  
6 Paragraph 8a of this Order, at all remaining CSO discharge points,  
7 consistent with the facilities plan approved by the Department;

8 (17) By no later than September 1 of each year that  
9 this Order is in effect, the Respondent shall submit to the  
10 Department an annual progress report on efforts to minimize and  
11 eliminate discharges that violate water quality standards. These  
12 annual reports shall include at a minimum work completed in the  
13 previous fiscal year and work scheduled to be completed in the  
14 current fiscal year.

15 b. Requiring Respondent to comply with all the terms,  
16 schedules and conditions of the Permit, except those modified by  
17 Paragraph 8(a) above, or of any other NPDES waste discharge permit  
18 issued to Respondent while this Order is in effect.

19 c. Requiring Respondent to demonstrate that each  
20 discharge is in compliance with water quality standards, by a means  
21 approved by the Department, within twelve months of the scheduled  
22 date when compliance is required in this Order. Nothing in this  
23 paragraph prevents the Department from enforcing this Order during  
24 the twelve month demonstration period.

25 d. Requiring Respondent to identify each discharge  
26 that is converted to a storm sewer discharge only.

1 e. Requiring Respondent, in the event that Respondent  
2 chooses to retain a Discharge with any connected sanitary wastes, to  
3 apply for a modification of Respondent's permit requesting a waste  
4 load increase and appropriately sized mixing zone. Nothing in this  
5 paragraph shall affect the Department's or the Commission's  
6 discretion over granting such a request.

7 f. Requiring Respondent, upon receipt of a written  
8 notice from the Department for any violations of the Stipulation and  
9 Final Order, to pay the following civil penalties:

10 (i) \$1,000 for each day of each violation of each  
11 provision of the compliance schedule set forth in  
12 Paragraph 8(a).

13 (ii) \$2,500 per outfall per day for each CSO  
14 outfall for which Respondent fails to demonstrate  
15 compliance with water quality standards as  
16 specified in 8(c). Discharges that are listed and  
17 regulated in Respondent's Permit as may be allowed  
18 in 8(e) shall not be subject to stipulated civil  
19 penalties under the terms of this Order.

20 9. If any event occurs that is beyond Respondent's reasonable  
21 control and that causes or may cause a delay or deviation in  
22 performance of the requirements of this Stipulation and Final Order,  
23 Respondent shall immediately notify the Department verbally of the  
24 cause of delay or deviation and its anticipated duration, the  
25 measures that have been or will be taken to prevent or minimize the  
26 delay or deviation, and the timetable by which Respondent proposes

1 to carry out such measures. Respondent shall confirm in writing  
2 this information within five (5) working days of the onset of the  
3 event. It is Respondent's responsibility in the written  
4 notification to demonstrate to the Department's satisfaction that  
5 the delay or deviation has been or will be caused by circumstances  
6 beyond the control and despite due diligence of Respondent. If  
7 Respondent so demonstrates, the Department shall extend times of  
8 performance of related activities under the Stipulation and Final  
9 Order as appropriate. Circumstances or events beyond Respondent's  
10 control include, but are not limited to, acts of nature, unforeseen  
11 strikes, work stoppages, fires, explosion, riot, sabotage, or war.  
12 Increased cost of performance or consultant's failure to provide  
13 timely reports shall not be considered circumstances beyond  
14 Respondent's control.

15 10. Regarding the violations set forth in Paragraph 3 and 4  
16 above, which are expressly settled herein without penalty,  
17 Respondent and the Department hereby waive any and all of their  
18 rights to any and all notices, hearing, judicial review, and to  
19 service of a copy of the final order herein. The Department  
20 reserves the right to enforce this order through appropriate  
21 administrative and judicial proceedings.

22 11. Regarding the schedule set forth in Paragraph 8(a) above,  
23 Respondent acknowledges that Respondent is responsible for complying  
24 with that schedule regardless of the availability of any federal or  
25 state grant monies.  
26

1           12. The terms of this Stipulation and Final Order may be  
2 amended by the mutual agreement of the Department and Respondent.

3           13. Respondent acknowledges that it has actual notice of the  
4 contents and requirements of the Stipulation and Final Order and  
5 that failure to fulfill any of the requirements hereof would  
6 constitute a violation of this Stipulation and Final Order and  
7 subject Respondent to payment of civil penalties pursuant to  
8 Paragraph 8(e) above.

9           14. This Stipulation and Final Order shall terminate 60 days  
10 after Respondent demonstrates full compliance with the requirements  
11 of the schedule set forth in Paragraph 8(a) above.

12           15. If it becomes necessary to allocate wasteloads as a result  
13 of either the Willamette River or the Columbia River being  
14 designated as Water Quality Limited, the parties agree that  
15 Respondent's reductions in discharges pursuant to this agreement  
16 will be considered as contributing to Respondent's share of the  
17 obligation to achieve water quality standards.

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RESPONDENT

\_\_\_\_\_

Date

\_\_\_\_\_

(Name)

\_\_\_\_\_

(Title)

DEPARTMENT OF ENVIRONMENTAL QUALITY

\_\_\_\_\_

Date

\_\_\_\_\_

Fred Hansen, Director

FINAL ORDER

IT IS SO ORDERED:

COMMISSION

ENVIRONMENTAL QUALITY

\_\_\_\_\_

Date

\_\_\_\_\_

Fred Hansen, Director

Department of Environmental Quality

Pursuant to OAR 340-11-136(1)



The Oregonian/TIM JEWETT

Mark Pratt of Northwest Environmental Advocates holds a hypodermic syringe found along the bank of the Willamette River. Syringes are tossed into storm

drains by intravenous drug users and are later flushed into the Willamette River during rainstorms. Many end up on riverbanks where children play.

# Willamette's role as sewer challenged

□ The agreement on a need to remedy the problem in Portland doesn't provide a solution

By **STUART TOMLINSON**  
of The Oregonian staff

As they walked along the east shore the Willamette River below the Broadway Bridge recently, Mark Pratt and Christine Toth armed themselves for the task at hand. Each wore heavy boots and rubber gloves and clutched tongs — essential gear for anyone interested in combing the Willamette's inner-city shores.

"You can't go poking into these piles without protective gear," said Pratt as he knelt down near a pile of debris. Reaching carefully beneath a log he pulled out a hypodermic syringe. The syringe still contained blood.

Orange hypodermic caps, the junkie's signature litter, dotted the riverbank. So too did empty fishing line reels, aerosol cans, wire cable, shoes, jackets, cans, plastic jugs and condoms. Pratt has a plastic jug full of syringes, needles he has collected on the very same riverbank in just hours.

Pratt, 36, and Toth, 30, began canoeing

on the river last spring. Like most Portlanders, they had thought of the Willamette as a recreational treasure and home for a variety of ducks, coots and seagulls and dozens of species of fish.

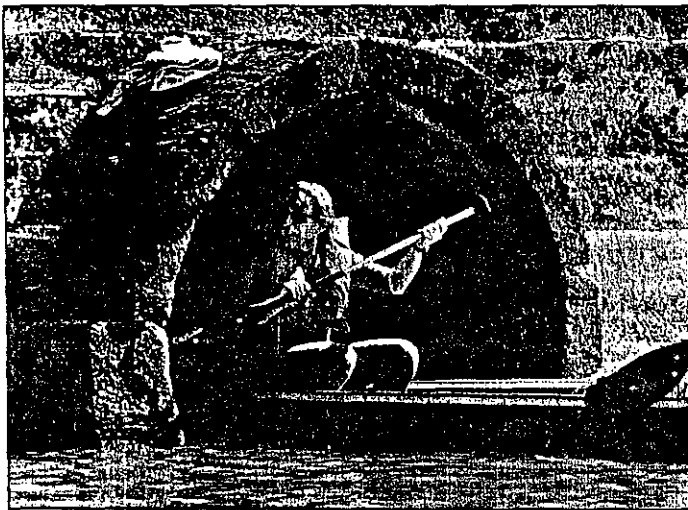
Up close, they learned otherwise. The Willamette is a ditch.

"When I found out that there was millions of gallons of sewage being dumped in the river, I was completely stunned," Pratt said.

"It's more than just sewage," he added. "We put this stuff — solvents and whatever — right down the drain and think it's going to be treated. But it isn't."

□

The river has been an integral part of the city sewage system for more than a century. When it rains hard, rainwater and raw sewage mix and are dumped directly into the river through a network of sewer pipes. But Oregon's Department



The Oregonian/TIM JEWETT

Mark Pratt backpaddles his canoe into one of the larger sewer pipes on the Willamette River. A swarm of black flies prevented him from entering deeper.

Please turn to **SEWER**, Page B4

# Sewer: State favors 20 years to end problem

## ■Continued from Page B1

of Environmental Quality, the city's Bureau of Environmental Services and the U.S. Environmental Protection Agency all agree that the system needs to be improved.

The state wants to give the city 20 years to clean up and improve the system, parts of which have been in place since the 1880s. The city says 20 years may not be long enough and \$1 billion — the estimated cost to city taxpayers — may not be enough money to do it.

The Portland City Council has all but signed off on a plan to raise sewer rates by 25 percent on July 1. The extra revenue would help pay for up to 52 new employees, most of whom would work on the project to clean up the Willamette and the nearby Columbia Slough, which city officials acknowledge is one of the state's most polluted waterways.

The Bureau of Environmental Services says the proposed increase would boost sewer rates from \$11.40 to \$14.25 every three months. Bureau director Mary Nolan says sewer fees could increase by 20 percent annually "for a while" to pay for the system's overhaul.

Before the Columbia Boulevard Wastewater Treatment Plant was built in the late 1940s, the city dumped raw sewage directly into the river through a network of 56 pipes that handled both storm-water runoff and sewage from homes and businesses. After plant and construction interceptor dams and pipelines were completed, sewage was sent to the plant and treated wastewater was later dumped into the Columbia River.

Normally, a steady 3-inch high river of sewage hits a 4-inch high dam beneath city streets. The sewage is then shunted to the treatment plant. Most storm runoff is not treated.

When it was built, the system was considered state of the art. But the state is under pressure from the EPA to enforce federal water quality standards. For the city, that means years of studies, increased sewer rates and massive overhauling of the system.

"It's a great system," said city engineer Jeff Bauman. "Except when it rains."

When it rains as little as .15 inch, the interceptor dams can't handle it all. Raw sewage and rainwater mix along the city's 1,600 miles of sewer lines and enter into the river.

Bacteria levels rise. Birds — including the great blue heron, the

city's official bird — eat near the sewer pipes. People fish near them. People swim, boat and water-ski around them.

During the first 30 minutes of rainfall, any dead animals and birds, needles, garbage, condoms and road oils and grease that have accumulated in the storm drains are flushed to the river. Storm runoff is not treated.

The sewer pipes line the river from Tryon Creek in the south to Sauvie Island at the mouth. Another dozen or so spew their cargo into the Columbia Slough.

Two large pumping stations — the Ankeny and Sullivan stations, both located near the Burnside Bridge — and 83 smaller pumping stations ensure that raw sewage goes to the treatment plant, and not the river.

The system handles about 80 million gallons a day and can handle almost three times that much.

Now if it rains and the river level rises above 15 feet, the pumps must send the excess directly into the river or it will back up into the businesses and homes close to the river. That happened in 1964, and it cost the city over \$1 million to clean up.

The Sullivan pumping station failed in 1986, 1987 and in 1988 during Rose Festival, sending 2 million gallons of raw sewage into the river. Another spill occurred in 1989.

The DEQ fined the city \$5,000 for the June 1988 discharge. The city was also fined a total of \$100,000 by the EPA for discharges that occurred in 1988 and 1989.

The city has taken steps to prevent the pumps from failing by installing new backup computers at both the Ankeny and Sullivan pumping stations at a cost of \$70,000.

Another \$3.5 million was allocated last week to install new variable speed pumps to handle even more sewage. The old pumps can pump about 23 million gallons a day to the treatment plant. The added pumps will be able to handle 35 million gallons a day from the Ankeny pumping station alone.

□

Portland isn't alone with its problem of combined sewer systems.

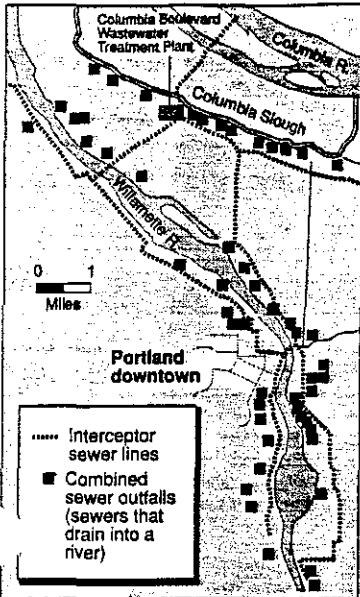
Outdated sewer systems cause similar problems in Chicago, New York City, Cleveland, Seattle, Oakland and Sacramento, Calif.

In all, 1,025 cities in the United States operate much the same way. Rivers and lakes bear the burden of too much sewage from heavily populated urban areas.



## HOW PORTLAND HANDLES ITS SEWAGE

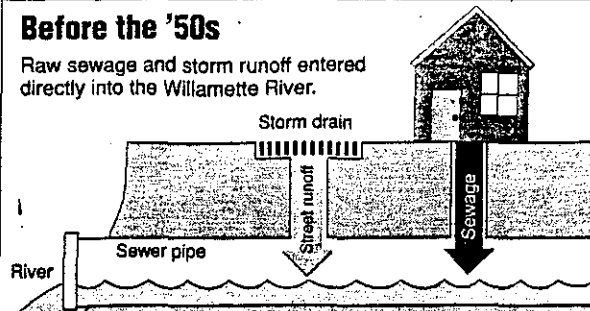
There are more than 50 pipes where sewage and street runoff drain the city's 1,600 miles of sewer and storm system. Most sewage from homes and businesses is treated at the Columbia Boulevard Wastewater Treatment Plant. When it rains, the outfalls dump street runoff and raw sewage directly into the river. Pumping stations help along what is a basically a gravity-controlled process.



Source: Portland Bureau of Environmental Services, Oregon Department of Environmental Quality.

### Before the '50s

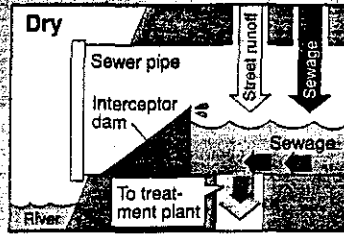
Raw sewage and storm runoff entered directly into the Willamette River.



### After the '50s

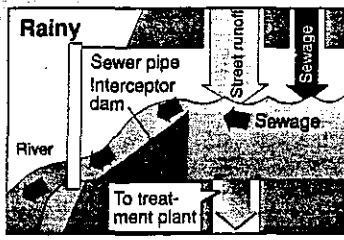
#### DRY WEATHER

Interceptor dams and interceptor pipes were built to divert raw sewage from the river, instead sending it directly to the treatment plant.



#### RAINY WEATHER

As little as .15 inch of rain causes sewage and street runoff to mix and flow over the dam and directly into the river. Rain can also overload pumping station, causing more raw sewage to enter the river.



## ON THE TABLE

An agreement yet to be signed between the city of Portland and the Oregon Department of Environmental Quality would give the city 20 years to correct all water-quality problems. It would give the city 10 years to clean up the Columbia Slough.

The proposed agreement is based on meeting federal water-quality standards and calls for:

- Low-cost, interim control methods that can be taken soon to minimize some discharges of sewage. The plan for such methods as catch basins, better use of the current system and using experimental, man-made wetlands must be completed by Dec. 31, 1992, and implemented by Oct. 1, 1994. Improvement of the Ankeny and Sullivan pumping stations is under way.

- A plan to handle some discharges by Dec. 1, 1995. This could include screening floatable debris at sewer pipes.

- Solids and floatables to be removed from discharges into the Columbia Slough by Oct. 1, 1996.

- Elimination of one-third of discharges, including all from the Columbia Slough. To do this, the city must begin construction of facilities by May 1, 1998, and finish them by Dec. 1, 2001.

- Elimination of another one-third of discharges by Dec. 1, 2006.

- Elimination of the remaining one-third of the discharges that violate water quality standards by Dec. 1, 2011.

- The city's Bureau of Environmental Services to submit an annual progress report to DEQ on all work scheduled or completed.

#### Penalties

DEQ would fine the city \$1,000 for each day of violation of the schedule. Another \$2,500 fine would be assessed per day for each sewer pipe that discharged and violated water-quality standards beyond the date the pipe was scheduled to have been eliminated.

Source: Oregon Department of Environmental Quality, Portland Bureau of Environmental Services. The Oregonian

The city of Chicago built huge catch basins at a cost of at least \$1 billion apiece. San Francisco is in the midst of similar construction.

Every five years, DEQ must issue a permit to Portland, a permit that allows the city to discharge raw sewage into the Willamette River and treated and raw sewage into the Columbia Slough. The city now is operating under a permit that expired two years ago.

In renewing the permit, the DEQ will also require more testing of what's being discharged from the Columbia treatment plant, including heavy metals, dioxin and PCBs. Requiring industry to pretreat some waste will help this process.

A proposed agreement between DEQ and Portland would require the city to upgrade the automatic control systems in the Ankeny and Sullivan pumping station — a process already begun — and outlines improvements that must be done well into the next century.

Portland has many options, all of them expensive and time-consuming.

One could tear up all the streets and divert rainwater and sewage to the treatment plant. It could build large catch basins, hold the sewage and treat it and send it on to treatment plants.

Other options include storage

facilities and smaller treatment plants built right near the combined sewer and storm-water drains.

The city is spending \$3 million to have two consulting firms examine these options and come up with some recommendations.

Also under study is the idea of sending some sewage through man-made wetlands that would filter out solids and heavy metals.

Bureau engineer Bob Eimstad said cities have accomplished the relatively simple process of treating sewage with sewage plants. Lots of federal money was available in the 1970s to build treatment plants. But Portland is moving toward a more comprehensive approach, hoping to both eliminate its combined sewer system and both sanitary sewage and storm runoff.

"We know we have a problem with our storm water," Eimstad said. "If we separate out our storm water and send it straight to the river, we'll still have a pollution problem in the river."

The non-profit group Northwest Environmental Advocates has taken direct aim at the city of Portland and the DEQ with a lawsuit to prevent the permit being issued. Nina Bell, executive director of the environmental group, said she expects to file the suit April 15 in U.S. District Court.

"If DEQ issues the permit, we feel like we don't have much choice other than to sue," Bell said.

Bell said EPA regulations and the Clean Water Act of 1972 prohibit states from issuing permits to municipalities to protect themselves from citizens' suits.

She also said DEQ has rushed the process to discourage public comment on the proposals. DEQ held a public hearing March 25 and is accepting public comment until April 19.

Bell said her group protests the city's insistence on deciding itself how to handle the problem.

"We applaud the fact that DEQ wants to do something," Bell said. "But as proposed now, the permit is in our opinion, illegal."

Last fall, Pratt and Toth joined Northwest Environmental Advocates with the idea of informing the public through seminars and boat tours of the river and the Columbia Slough.

For his part, Pratt thinks the city's bureaucrats are too removed from the river.

"They live up in the West Hills and they come to the river in a speedboat and go by at 30 mph," he said. "It looks great from there."

The Oregonian

Then they go out and get scientific data from someone.

"They're not out there on the river, they're not walking along these banks and seeing this junk."

Pratt thinks part of the problem is that the harbor wall at Tom McCall Waterfront Park limits public access. "Portland has separated its citizens from the river," he said.

Portland, OR  
(Multnomah Co.)  
St. Johns Review  
(Cir. W. 3,292)

MAR 21 1991

Willamette Co. Est. 1888

## DEQ to discuss sewer problem

5165

**S**ewer overflow into the Columbia Slough and Willamette River is a problem which the Oregon Department of Environmental Quality is hoping to solve when it renews the city of Portland water quality and discharge permit.

As a result, the DEQ set up a meeting in St. Johns on March 19 to tell residents what they have in mind.

Under the proposed permit, the DEQ will recognize and set limits for the untreated sewage that spills out of the sewer system.

Currently the system, which combines water from storm drains with regular sanitary sewage discharges, cannot handle the water flow during periods of heavy rain.

The result is that the system overflows, allowing untreated sewage to enter the Columbia Slough near the wastewater treatment plant on North Columbia Boulevard and several other sites on the Willamette River.

"The citizens of North Portland play several roles on many different levels," said DEQ spokeswoman Carolyn Young, about why the informational meeting was scheduled for St. Johns.

"The meeting was held in St. Johns because there was a lot of concern about the sewer system there."

In the permit renewal, the DEQ proposes that the city study and set timelines for controlling sewer overflows.

"The dollar cost is going to be quite large and there will be a range of available options and citizens must be involved in making this very important policy decision," Young said.

Citizens can voice their concerns about the new sewer permit a public hearing to be held at 7 p.m. Monday, March 25, in the Portland Building hearing room, 1120 S.W. 5th Ave.

# Hearing on city sewer permit dramatizes Willamette pollution

By **STUART TOMLINSON**

of The Oregonian staff

The Willamette River is a home to birds and wildlife and a recreational haven for boaters and swimmers. But as it flows through Portland, it becomes an open sewer where condoms and toilet paper hang on low-lying branches and hypodermic needles full of blood rise to the surface.

That assessment was just one of the complaints voiced at a public hearing Monday in the Portland Building. More than 60 citizens appeared at a state Department of Environmental Quality forum to discuss granting the city of Portland another five-year permit to discharge wastewater into the Willamette River and Columbia Slough.

Portland's sewer system — in place since the late 1940s — relies on sewer outfalls to handle overflows of human waste and rain runoff. Simply put, when it rains hard, rainwater and raw sewage mix and are dumped directly into the river through 54 pipes, instead of being treated at the city's Columbia Boulevard Wastewater Treatment Plant.

Raw sewage is also dumped directly into the Willamette when pumping station computers or pumps fail. It happened during Rose Festival in 1988, when the Sullivan pump station failed and sent 2 million gallons of sewage into the river.

The DEQ also wants to give the city 20 years to clean up all water-quality problems on the Willamette and 10 years to clean up the Columbia Slough. The DEQ has outlined a cleanup agreement that will hold the city to the timetable. The city says it may take longer and cost sewer ratepayers \$1 billion.

"That's hogwash," said Nina Bell

of Northwest Environmental Advocates. The non-profit environmental group has notified the city it intends to file a lawsuit to prevent the permit from being issued.

Bell said the DEQ's issuance of the permit is intended to protect the city from litigation and that issuing the permit to allow illegal dumping is illegal.

She also said the DEQ has rushed the process to stop any prolonged public comment on the proposals. Notice of the proposed permit was issued March 4, and the public has until April 19 to comment on the permit and the cleanup plan.

Bell said her group protested the city's insistence on deciding itself how to handle the problem.

"Why doesn't DEQ tell the city what to do and how to do it?" she asked.

Eugene Rosolie of Northeast Portland said if the city of Portland were a corporation dumping the volume of sewage it does into the river, citizens would be outraged.

"Somehow, the city gets to hide," he said.

The most graphic presentation of the hearing was made by Mark Pratt, also of Northwest Environmental Advocates.

Pratt carried to the lectern a plastic jug holding six blood-filled needles he said he had collected along the Willamette River in Portland in one half-hour.

"At first we thought all boaters were junkies," he said. "But the real junkies are throwing these things in toilets and storm drains, and they're winding up in the river."

Pratt said it wasn't just needles and raw sewage making its way to the Willamette River. He said there are also solvents and medical waste, condoms, tampon applicators and toilet paper flowing in every day. He

said it's common to see Portland's official bird — the great blue heron — feeding near the sewer outlets.

"You can't see the waste when you're going down the river in a speedboat at 30 mph," he said. "You have to get up close to the shore to see the foaming brown slime coming out of the pipes, the condoms hanging on the branches and the needles dotting the riverbank."

"Is this Oregon?, he asked. "If it is, we're going to get a whole new image."

Jeff Bauman of the Bureau of Environmental Services said the city expected to make its largest investment of money ever on improving Portland's sewer system. He said the city has already spent \$32 million on the combined sewer-outfall problem and has proposed a budget of \$36 million for fiscal year 1991-92.

Bauman said the city would install new pumps, clean up catch basins and try to halt individual waste polluters at a cost of \$1 billion over 20 years. That would translate to an additional \$5,000 per ratepayer in increased sewer rates tied specifically to water quality.

Twenty years may not be enough time to clean up either the slough or the Willamette River, Bauman said, because existing pollution may exceed water-quality standards even with all the improvements in place.

In signing the cleanup order, the city would agree to correct all water-quality problems by Dec. 1, 2001, with interim goals of minimizing discharges and eliminating solids and floatables from the Columbia Slough by Oct. 1, 1996. Construction of facilities would begin by May 1, 1998.

"We want to do it quickly and correctly," Bauman said.

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: April 25, 1991

TO: Lydia Taylor

FROM: Barbara Burton, Manager Municipal Wastewater Section  
George Davis, Supervisor Northwest Region

SUBJECT: Summary of Testimony and Department Response, City of Portland Hearing, March 25, 1991, and Written Comments Received Regarding Permit and Draft Stipulation and Final Order

A proposed National Pollutant Discharge Elimination System (NPDES) permit renewal for the City of Portland wastewater collection system and treatment plant was drafted and made available to the public on March 4, 1991. A Stipulation and Final Order was also drafted, which included provisions regarding the City's Combined Sewer Overflows (CSO's). Although not required by law to follow the public notice and request for comment procedures, the Department made the draft Stipulation and Final Order (Order) available for public comment on March 25, 1991. The public comment period for both the permit and Order were extended to April 19, 1991.

The Department held a public informational meeting on March 19 in St. Johns, and a formal public hearing on March 25, 1991 at the Portland Building. Linda Zucker was the hearing officer. The purpose of the hearing was to receive public testimony regarding the proposed NPDES wastewater permit renewal for the City of Portland sewage treatment collection and treatment facilities. In addition, comment was solicited regarding the proposed Stipulation and Final Order (Order).

Approximately 30 people attended the informational meeting, and approximately 80 people attended the public hearing. Thirty-one people testified at the public hearing. An additional twenty-two persons or organizations submitted written testimony.

The following is a summary of the issues raised both in oral and in written testimony, and the Department's responses.

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Impact of Combined Sewer Overflows on Public Health and Use of the Columbia Slough and Willamette River

1. Raw sewage in Oregon waters is totally unacceptable, and none should be allowed. It is a public health hazard for boaters, swimmers, people eating fish caught in the area, kids playing on the banks of the Columbia Slough, and water skiers using the River.

Department response: Raw sewage discharged to public waters does cause a public health concern, and should be eliminated. Oregon has set standards for fecal coliform that are intended to protect such public uses of our waters as boating, swimming, and water skiing. These standards are violated in the Columbia Slough, and are violated periodically in the Willamette River in the Portland area.

The problem of periodic discharges of raw sewage to public waters is not unique to the City of Portland or to Oregon. In years past, the Department has worked with many cities to eliminate such discharges. The Department is proposing to require Portland to also eliminate the discharge of raw sewage to public waters.

2. Both the Columbia Slough and the Willamette River in Portland are heavily used for recreation either currently or in the past. With the spreading use of wet suits, many more people are using the River in colder wetter weather, when the CSO's are more likely to be discharging and creating a health risk. Raw sewage discharges should be stopped.

Department response: We agree. See response to issue number 1 above.

3. Mixing zones for CSO's are not appropriate, since these outfalls are not posted and people may inadvertently come in contact with the combined raw sewage and stormwater discharges. If mixing zones are allowed, then Portland should be required to post each CSO.

Department response: Mixing zones are routinely allowed in Oregon for all discharge points, as a zone of mixing at the end of the discharge pipe where water quality standards may not be met. We agree that it might not be safe to swim in the mixing zone of the CSO discharge, because of bacterial contamination. The mixing zone for the CSO's will be removed, and the CSO's will be required to meet water quality standards at the end of the pipe.

4. The public health and environmental concerns are not only for the sewage discharged into the waterways, but also for other materials that can be discharged. These include dirty needles, medical wastes, condoms, solvents, and industrial wastes. The banks of the Willamette at places have significant accumulations of this debris, and people walking along the banks are at risk too.

Department response: We agree - some of the solids discharged from CSO's can get washed up on the banks and cause unsightly conditions and a potential public health risk. The Department is proposing that the City undertake interim measures in Columbia Slough to screen out larger solids by no later than 1996.

The City has already initiated some interim measures to reduce the impact of the discharges. The Department is also proposing further interim control measures, to minimize water quality violations until final compliance can be achieved. The proposal for interim measures is due December 31, 1992, with Phase I and Phase II interim controls due to be completed by 1994 and 1997, respectively. Interim measures may include a more intensive industrial pretreatment program including increased testing for industrial dischargers to the City's sewers; improved use of in-line storage to minimize discharges; increased line flushing (to the treatment plant) in the summer, to reduce the heavy load of pollutants that occurs in the first heavy rain in the fall; and possibly screens. In addition, the City has already implemented some interim measures, and may be able to discuss these at the April 25 Commission work session.

5. No discharge of raw sewage and stormwater is acceptable. The Total Maximum Daily Load (TMDL) process that is followed to clean up dirty rivers allows some continued pollution, and is not acceptable.

Department response: Expecting totally pristine waters in urbanized areas is not realistic, and may not be achievable at any price. Where there are people, there will be some impact on water quality. The Department protects pristine waters where they exist. Other rivers and streams are protected to allow beneficial uses including water contact recreational activities such as swimming and water skiing.

Where water quality is such that beneficial uses are not totally protected, as is the case in the Columbia Slough and may be in the Willamette River in Portland, we require action be taken to improve the water quality through the TMDL process. However, we recognize that some pollution will

still occur. This is acceptable as long as recognized beneficial uses are protected.

This process and approach, which allows some continuing pollution, was set both in statute by our elected legislators, and by administrative rule following public participation and comment procedures.

6. Sewage spills or overflows are bad for many businesses, including boat rentals, fishing guides, water skiing, restaurants overlooking the water front, and water skiing schools.

Department response: CSO's should be eliminated or controlled so that all people may comfortably use the River.

7. Poor water quality in the Columbia Slough can be remedied by either pumping in fresh water, or by opening up the Slough for flow-through by Columbia River water; conversely, a downstream resident thinks the Slough should be cleaned up by eliminating the CSO's rather than just flushed out.

Department response: Some of the water quality problems in the Slough are caused by stagnant conditions, and one option being evaluated is to pump in some cleaner water. However, the CSO's are the major cause of the fecal coliform portion of the water quality violations as well as other water quality violations. Water quality standards in the Slough will not and should not be met only by adding dilution water. The CSO discharges will have to be controlled or eliminated also.

Concerns regarding length of time proposed to eliminate violations, length of time CSO's have existed, the need or lack thereof to study discharges/options for correcting, and whether or not meaningful actions to correct problem will ever occur

1. The CSO's have been discharging for a long time, and the City and DEQ have known about them but not taken any meaningful action.

Department response: We recognize that this is a serious pollution problem. It is also a big problem to solve, and will be very expensive and may be very disruptive. It may require tearing up many of the streets in Portland, laying a whole new set of sewer lines, and disconnecting each individual house and business sewer line from the existing combined sewer and re-connecting to the new sanitary sewer line. It may cost over \$500 million dollars.

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DEQ has worked with cities on a city-by-city basis over the last ten years, rather than with a state-wide program to eliminate combined sewers. Most of the combined sewer systems in Oregon have been eliminated as part of a major sewage treatment plant upgrade, where large federal grants were available. The federal government has provided billions of dollars in grants to cities to build new sewage treatment plants, and in Oregon we have included as a condition of those grants a requirement that sewer systems be separated. For example, Oregon City is in the last stages of separating their sewer systems, as they were required to do in order to receive federal funds for the big new Tri-City treatment plant. Portland has not had a federal grant to upgrade their treatment plant recently.

As in other parts of the country, in Oregon there has been considerable dependence on federal grant dollars to correct major deficiencies in sewage treatment plants and sewer systems. There has been little or no money available for CSO projects. Oregon has been reluctant to require cities to move forward with very expensive sewer projects unless there has been grant money available to help out. The Portland CSO project will be very expensive.

As to why we are moving now, a number of events have all come together. First, the City's permit is up for the five year renewal, and that is the time that DEQ looks hardest at pollution issues. Second, the Columbia Slough has been formally designated as "water quality limited", which triggers clean up activities. We know that combined sewer overflows are a major contributor to pollution in the Columbia Slough. Third, we Oregonians are simply more sensitive to and protective about the environment than we were five years or ten years ago. Fourth, there is more use of our rivers now than there was five years ago. And finally, nationwide there is a push to control the effects of combined sewers. EPA has developed an overall strategy to minimize or eliminate the impact of these types of discharges, and has required that each state develop its own plan. Oregon's plan for controlling CSO's was finalized in February, 1991.

In hindsight, this is a problem the City and the Department should have started on five years or more ago. We are starting on it now.

2. Portland has done one study after another, as a means of avoiding actually doing something about eliminating raw sewage discharges. The proposed permit and order are more of the same - a study but with no action resulting.



Department response: Regardless of what did or did not happen with studies done by the City in the past, the Department fully intends that the City move forward now to correct existing water quality problems. The Order includes a detailed schedule with mileposts to insure that there is follow through. Substantial stipulated fines are included if schedules are missed.

3. DEQ has not spelled out the content of the study to be done. Past studies have not produced the information needed, which is why study after study has been done. DEQ should be very specific about the contents of the study, so that the study does not have to be done over.

Department response: We agree that the content and goals of the facilities plan need to be carefully thought out and communicated to the City, in order that the plan produces the information necessary to proceed to construction. The revised Order includes a listing of major points to be included in the facilities plan. The revised Order also adds a requirement that the City submit a draft facilities plan, specifically for the purpose of allowing Department review to insure that the necessary information is included in the study. And finally, the order and the permit require the City to submit an "approvable" facilities plan, with fines if the date is not met. The term "approvable" is used to insure that the document developed and submitted includes all the information that DEQ thinks is necessary.

The Department is proposing to amend the proposed order, to include an additional step to allow the Department to review and approve an outline of the work to be completed in the facilities plan.

4. The City needs to build a new sewage treatment plant, and should be required to upgrade to 20 mg/l biochemical oxygen demand (BOD) and total suspended solids (TSS) during the summer discharge period.

Department response: The existing sewage treatment plant currently meets discharge standards, and the Department is not requiring that the plant be upgraded or expanded at this time. However, we are concerned about the impact that some possible CSO control strategies may have on the compliance status of the treatment plant. If substantial additional flows to the plant are part of the CSO control strategy, for example, then the Department would expect the City to evaluate the impact of these additional flows on the treatment plant and its discharge. If the existing sewage

treatment plant cannot process the additional flows without violating discharge standards, then the City will be required to expand or upgrade the sewage treatment plant. The facilities plan for CSO's must include a strategy for meeting water quality standards at the CSO's, and meeting the sewage treatment plant discharge standards.

Oregon administrative rules require that sewage treatment plants must meet specified minimum design criteria when a significant upgrade or expansion occurs. If and when the City is required to upgrade or expand the Columbia Blvd plant, the new plant will be required to meet the 20 mg/l BOD and TSS standards listed in OAR 340-41-455(e)(A) during the period of May 1 through October 31.

5. DEQ should not allow the City to do any further studies; rather, they should tell the City what to do to correct the CSO's.

Department response: Neither the Department nor the City has the necessary information to proceed to construction. We do not know how much is discharged from which CSO, nor how frequently, as just one example. This information is necessary in order to determine the sizes of pipe or in-line storage basins, if either is chosen as a control measure. How much, what kind, and the locations of construction projects have not been determined. The cost of the project, and how it will be financed has not been determined. The impact of various possible control strategies on water quality has not been determined.

The Department has extensive experience with large sewage projects, through involvement with the EPA construction grants process. It is absolutely necessary that adequate planning proceed any large, complex construction project. This is necessary both to assure that the project will accomplish what we want it to (eliminate water quality violations), but also to insure that the lowest cost, environmentally sound project is selected. With a potential cost of over \$500 million, it would not be prudent to proceed without carefully evaluating the alternatives available.

6. Twenty years is too long to complete the CSO strategy. A whole generation of Portland kids will miss out on water recreational activities.

Department response: Again, this is a very big, very expensive project. 60% of Portland has combined sewers, and it will be a huge undertaking to separate sewers or otherwise control them. The twenty year time frame is not unrealistic,

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compared to other big city CSO projects such as San Francisco (20 years after completion of study) and Seattle (thirty years). The EPA person responsible for CSO's nationally says that 10 to 20 years is typical.

While it will take twenty years to complete the project, we will see improvements before then. CSO's to Columbia Slough will be controlled within 10 years, along with seven other CSO's. Some interim control measures have been initiated and more will be put in place.

7. Twenty years may not be long enough to complete this project, since there are a number of factors that may be beyond the reasonable control of the City. An example would be the requirement to get an Environmental Impact Statement for construction near the water, which could take years. For this reason, the City would like to see "re-opener" clauses to require the Order and time schedule be reconsidered whenever new information becomes available.

Department response: An additional condition is proposed, which will require that the Commission review and approve the facilities plan when it is completed. This will be the appropriate time to review the time schedules set, to review any national changes in CSO control requirements, and to receive public input about both the schedule and the proposed work to be done. The existing provision in the Order allowing modification if both parties agree is adequate, and no further changes in the Order are needed.

The Department is serious about the CSO's being controlled within the twenty year time frame. Extensions will only be granted if there are very compelling reasons for doing so. We recognize that there may arise circumstances that are truly beyond the reasonable control of the City, and we will be willing to consider them and grant extensions if absolutely necessary; however, our expectation is that the City will control the CSO discharges within twenty years.

Concerns regarding public participation for the permit and order, public notification in years past of raw sewage discharges

1. These discharges have been occurring for years, and yet the public has never been informed. DEQ notifies the public when a pump station breaks down, and the public is misled to believe that this is the only time when raw sewage is discharged. The City has done nothing in terms of notifying the public of this problem.

Department response: There have been a number of news articles on this issue. The City sent out an informational insert with the monthly sewer billing, at DEQ's request. The City has also discussed this issue before the City Council on several occasions. The Commission discussed this issue with Portland in late 1988 public meeting.

2. The chance to comment period on the permit and order has been much too short, and the Department has attempted to hide important portions of these documents from the public.

Department response: We take very strong exception to this sentiment. We feel we have been very responsive to the public's desire to know about this issue, and to provide an adequate opportunity to comment. The Department conducted a public informational meeting in addition to the public hearing for the permit. The Order was made available to the public for comment once it was clear that there was interest in doing so, although Orders are not required to go through the formal public comment process. The Department extended the comment period on the permit to over six weeks total, and extended the comment period on the order to a total of three and a half weeks. As this record clearly shows, there has been substantial input from the public on the Portland permit and order. Based on the length of time already allowed for comment, and based on the amount of comment received, the Department does not feel that any additional time to comment on the Order or permit is necessary or warranted.

One commenter requested that the proposed Memorandum of Agreement between the City and the Department be made available for public comment. This document is currently being drafted, and is part of the TMDL process approved by the Commission. The Memorandum of Agreement will cover actions by the City and Department regarding efforts to clean up the Columbia Slough. In response to this request from the public, the Department will be making the draft Agreement available for public comment when it is completed.

There has not been at any time any attempt by the Department to prevent the public from reviewing and commenting on this issue, once the Department was made aware of an interest by the public in viewing these documents.

3. The public participation process is a sham, and the Department is totally unresponsive to comments received.

Department response: We disagree. The Department is sincerely interested in the comments of the public, and we carefully review them. A number of the points raised in

this hearing and public comment period have been incorporated in the Order or permit, including comments about requiring the study be more carefully defined ahead of time, and that the treatment plant capacity should be reviewed as part of the CSO study.

4. One year is too long for the City to develop a public notification process for CSO discharges, and is too long to notify DEQ about any other discharges not previously reported. [Note - the permit requires that a public notification plan be developed and submitted to the Department by 12/31/91. The City is also required to notify the Department on any other previously unknown discharges by the same date.]

Department response: Neither the City nor the Department knows of any other discharge points. However, many cities with older sewer systems have underground connections between the sanitary sewers and storm sewers, or unknown overflows at older pump stations. The purpose of the permit condition is to have the City re-examine their sewer system to see if there are any other discharges, and if so where are they and how often do they discharge.

Regarding the public notification procedures, the City will have to gather data including under what conditions each CSO discharges, and for how long, and what the impact on water quality is, and then propose a process for posting and/or notifying the media when conditions warrant. The Department would then review and approve or revise. This process cannot be completed earlier.

There Should Be a Sewer Moratorium Until CSO's Are Fixed (Mid County Sewer Project Should Be Put On Hold for Twenty Years)

1. There should be a moratorium on all sewer hook ups until CSO's are eliminated, particularly in Mid-Multnomah County.

Department response: The Department does not support a sewer moratorium at this time. It is true that some increase in CSO discharges may occur as more houses are connected to the Portland sewer system. However, most of the sewage will continue to be transported to the Portland sewage treatment plant for proper treatment before discharge.

Regarding the Mid-County sewer project, the Department continues to support the elimination of cesspools as quickly as possible. In general, if there has to be a discharge of incompletely treated wastes, it is far preferable for that discharge to be to surface waters than to groundwater.

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Groundwater takes a long time to flush out pollutants, whereas surface waters are quickly cleaned once the discharge stops.

2. The Mid-County sewer project was allowed to proceed without storm sewers being constructed at the same time, so that the sewers will be in effect combined sewers. This was short sighted at best, and was for the purpose of bringing the cost down so that people would support the sewer project.

Department response: It is true that the Mid-County area will not have a storm sewer system. Storm sewer systems are normally put in where there would be problems with streets or homes flooding from lack of drainage. The Mid-County area has relatively porous soils, and no storm sewer system is considered necessary at this time. The sanitary sewers will be constructed according to standards requiring leak tests. These standards will prevent stormwater from entering the sanitary sewers. The Mid-County sanitary sewers will not be carrying stormwater.

Water Quality Standards/Frequency Basis for Controls/Environmental Cost/Benefit Analysis

1. The Department has been talking about relaxing water quality standards in order to allow CSO's to continue to discharge. The Department should be up front about it and tell the public what it intends to do about water quality standards.

Department response: Water quality standards are adopted by the Environmental Quality Commission, not the Department. Any revisions to the water quality standards would have to go through a rule making procedure, with public input. In addition, any changes in water quality standards would have to meet EPA "anti-backsliding" requirements. One of these anti-backsliding requirements would include no reduction of water quality standards that would result in existing beneficial uses not being supported.

The Department has included in the Order an engineering design criteria for possible CSO strategies, namely that no discharges that could violate water quality standards are allowed up to a one in five year winter storm event, and a one in 25 year summer storm (to be changed to a one in 10 year summer storm). For the Portland area, a five year winter storm would be 3.5 inches of rain in a 24 hour period. This means that discharges that could result in water quality standards violations would only be allowed if it rained 3.5 inches or more in a 24 hour period during the winter. This is consistent with the standards that all new

construction of sewage pump stations, sewer systems, and sewage treatment plants must meet. During such storm events, it is highly unlikely that any water contact sports are occurring. We feel that this engineering design criteria is protective of public use of Oregon waters.

The Department has no plans at this time to initiate rule making to relax water quality standards.

2. The proposed engineering design standard of no water quality standard violations except in a five year storm event in the winter, and a 25 year storm event in the summer, is much too stringent and will be prohibitively expensive to accomplish. Other cities around the country with CSO's are instead having to design control strategies around a much less stringent discharge frequency. No design standards should be set until after studies are completed which show discharge frequency and cost for different alternatives.

Department response: We disagree. The design requirement of five year storm event has been an Oregon design requirement for a number of years. The purpose of this design requirement is to protect the public that may use surface waters, since raw sewage bypasses can result in the discharge of disease causing organisms. When new pump stations are built, we review and approve the engineering plans only if the design capacity is sufficient to prevent bypassing up to a five year storm. When sewage treatment plants undergo a major plant expansion, we require that the collection system including pump stations be upgraded or leaks in the sewer system repaired, so that there is no bypassing from the sewer system up to a five year storm event. Oregon Administrative Rules (OAR) 340-52-020 gives the Department authority to set design standards for both sewage treatment plants and sewage collection systems.

Regarding the summer 25 year storm event, in reviewing this we agree that this is not consistent with Oregon rules and practices. OAR 340-41-034(f) requires that "Sewerage Construction programs should be designed to eliminate raw sewage bypassing during the summer recreation season (except for a storm event greater than the 1 in 10 year 24 hour storm) as soon as practicable..." The Department is therefore proposing to revise the Order to require that discharges that violate water quality standards be eliminated up to a 10 year storm event for the summer months.

There is no question that these design standards are much more stringent and protective of water quality than those used in many other states for CSO control projects. Allowing

a more frequent discharge from the CSO's would enable the City to explore other control options, that would be much less expensive. However, the Willamette River in the Portland area is now used for contact recreational activities for much of the year. The proposed stringent standards are consistent with those imposed on all cities in Oregon, and the Department feels that they are necessary to adequately protect the public using waters for water contact recreational activities such as water skiing.

The Department is proposing that the City prepare a facilities plan that explores the alternative control measures that are capable of meeting the five year winter and ten year summer storm events with no overflows that could violate water quality standards. The City is free to include other alternatives, including cost information, on control measures that would result in more frequent discharges. The City is also free to make their best case for less stringent control measures to the Commission and request that the Order be revised to allow them. The appropriate time for the City to make such a request would be at the completion of the facilities planning phase. The Department does not support any relaxation of these design standards at this time.

3. While it may be necessary for the City to control CSO's to some degree, what is being proposed is going to be very expensive. Prior to spending all that money, the public/City/DEQ should explore all area water quality problems/social problems and determine what is the "best" amount of money to spend on CSO controls. In an era of limited money resources, we may decide that it is more "cost effective" to spend money on light rail or Johnson Creek cleanups or other worthy project, and a lesser level of CSO controls, rather than spend all the available money on getting the last bit of pollution out of the CSO's.

Department response: Conceptually this is a very sensible approach, however it would be difficult to actually implement. Prior to even beginning such an evaluation, we would need to know what are the possible control alternatives, what are the costs, and what are the impacts on water quality of the different proposed control measures for CSO's. This information will be included in the facilities plan.

The Department is proposing to amend the draft SFO to require review and approval by the Commission of the facilities plan, which will include alternatives and cost information. That would be an appropriate time for the City and any interested



parties to bring forward concerns about cost versus environmental benefits for any proposed control strategy for CSO's. It should be understood, however, that Oregon is required by the Clean Water Act to protect the existing beneficial uses of our waters.

4. Storm water in and of itself contains significant levels of pollutants, including high levels of fecal coliform and heavy metals. Even if separate sanitary sewers are constructed, we have not gained much in terms of water quality impact since the storm sewers will still be discharging pollutants.

Department response: It is true that storm sewers can discharge large quantities of various pollutants. Nationally and in Oregon, storm water discharge permits are being issued for the first time to specifically regulate and control runoff from a variety of industries, construction activities, and municipal storm water sewers.

The amount of pollutants and potential public health impact from sanitary waste streams is considered much, much greater than that from storm sewers. It is for this reason that we have nationally had sewage treatment plants for over fifty years, but are now just getting to storm sewers and possible controls. Sanitary sewers carry human wastes including disease causing organisms. In addition, sanitary sewers carry industrial wastes which could greatly impact the receiving stream if discharged untreated.

Storm sewer discharges can include high levels of bacteria. The source of these bacteria, which could be of human or other animal origin, will need to be investigated on a city by city basis. We do know that in cities having separate storm and sanitary sewers, "cross connections" where sanitary wastes are deliberately or accidentally connected to storm sewers are relatively common. Remaining bacteria in storm sewer discharges, that come from other animal wastes, are considered of much less public health concern.

Portland will be required to meet water quality standards for both the storm and sanitary waste portion of the waste stream currently discharged from the CSO's. All point source discharges to public waters in Oregon will be required to meet water quality standards.

5. The City should not be held accountable for water quality standard violations caused by upstream water users. If water quality standard violations still occur after the City completes controls on the CSO's, credit should be given and

additional cleanup action for the River should shift to upstream polluters.

Department response: When waste load allocations are made on polluted streams, the Department attempts to be as equitable as possible. If standard violations continue in the Willamette River or Columbia Slough, the City's actions to reduce pollutants will be taken into account. However, past efforts alone will not guarantee that no further pollution reduction will be required by the City.

6. Water quality standards should be revised, to recognize that not all beneficial uses have to be protected all the time. For example, during major rain storms, bacterial levels can be higher because water contact recreational activities will not be occurring.

Department response: The Department has no plans for revising water quality standards or beneficial use classifications at this time. We recognize that bacterial pollution in particular may be difficult to control during heavy rain events. Our goal is to insure that the water quality in Oregon waters will fully support all appropriate beneficial uses at all times.

#### Legal/Procedural Questions Regarding Permit and Order

1. The general conditions were not included with the draft permit received for comment. Will the draft new general conditions be included, and if so will they include changes proposed by the City of Portland?

Department response: The old general conditions will be attached to the Portland permit. The Department drafted new general conditions earlier this year, and put them out for public comment. Based on this public comment, some revisions will be made. In addition, the Department will be briefly reviewing some of the issues raised with the Commission at the June Commission meeting. The revised general conditions must also be reviewed and approved by EPA. Once the revised general conditions are finalized, the Department intends to modify all current NPDES permits. An appeal period will be allowed to applicants. The soonest these new general conditions would be available would be in July, 1991.

2. The document entitled "NPDES Waste Discharge Permit Evaluation" does not appear to be adequate to meet the federal statutory requirements for fact sheets, and the administrative record required by 40 CFR 124.9.

Department response: The permit evaluation report referred to by the City is not the fact sheet referred to in federal rules. The permit evaluation report does include more detailed information regarding the basis for many permit conditions. The fact sheet for the Portland permit is the "Chance to Comment" notice issued by the Department March 4, 1991. 40 CFR 124.9 does not apply to these proceedings - this federal rule only applies when EPA is the permitting authority. The Department is the NPDES permitting authority in Oregon. The Department believes that the fact sheet fully complies with federal requirements for such documents.

3. Mass limits should not be included in the permit. Such limits should only be included if they are water quality based, and only after scientifically valid data is collected and evaluated to establish waste load allocations.

Department response: The Department has for many years used mass limits in all municipal permits for several reasons. First, the Department uses these limits in part to manage water quality by tracking total wasteloads discharged to a stream. Second, we use these values to insure that cities are not meeting effluent limits simply by diluting the effluent. Third, we use these limits to insure that cities are aggressively maintaining their sewer systems to exclude excessive stormwater and groundwater. Fourth, we think this is a much better indicator than concentration of the impact these discharges have on streams. And fifth, we use these values to insure compliance with OAR 340-41-026(2), which prohibits discharges in excess of presently permitted waste loads. The Department views these mass limits as necessary and valuable tools and intends to keep them in all municipal permits.

4. The BOD and TSS removal efficiencies required may not be attainable, particularly if significant additional flows currently being discharged at the CSO's are intercepted and sent to the treatment plant. The removal efficiencies listed in the proposed permit are apparently based on those met during the 1989 and 1990 records, and those were unusually dry years. Alternate language should be included allowing lower removal efficiencies.

Department response: Federal law does allow for lower removal efficiencies for systems that have combined sewers. The Department did use the last several years data, and we agree with the points raised by the City. The suggested alternate language will be incorporated in the permit. However, the City needs to be aware that the mass load limits will still apply and must be met. These limits will require

careful evaluation by the City and Department prior to sending large additional flows to the treatment plant.

5. Existing mass load limits will not be achievable if significant additional stormwater flows are routed to the treatment plant, and the mass load limits should be removed.

Department response: We agree that significant additional flows to the treatment plant may result in violations of the existing mass load limits, and these will not be permitted. Any CSO control strategy must demonstrate that it is capable of meeting water quality standards at the CSO discharge points and not cause permit violations at the treatment plant. Part of the CSO study must include the impact of any proposed additional flows on the treatment plant.

OAR 340-41-026(2) prohibits the discharge of additional waste loads over those currently allowed by the Department. These currently allowed waste loads are included in the mass limits. OAR 340-41-026(3) allows the Commission to grant a waste load increase, providing certain findings of fact can be made. If a waste load increase were to be requested by the City in the form of a permit modification request, the matter would be subject to public hearing and would be decided by the Commission. If the City expects to request a waste load increase, Department staff would be glad to meet with the City and explain the necessary information the City will have to gather to support a request for load increase. At a minimum, the City would have to demonstrate that the increased waste load would not violate water quality standards, and that no practicable alternatives to the waste load increase exist. Other findings required for a waste load increase can be found in OAR 340-41-026(3).

For the reasons stated in the previous answer, the Department intends to keep the mass load limits in the permit.

6. Federal law allows for certain defined and limited excursions of chlorine and pH values, and the permit should include these allowed excursions. Chlorine and pH should only be in violation if they exceed the limit in the permit for a time period specified in 40 CFR 401.17, namely no more than 7 hours and 26 minutes per month or 60 minutes consecutively. This definition of a violation should be included in the permit.

Department response: The reference cited only applies to pH, not to chlorine, although some of the same problems exist with measurements of both parameters. For the purposes of determining the daily chlorine residual discharged, EPA's

waste load derivation for effluent toxicity should be used. This derivation is provided and explained in EPA's Permit Writer's Guide to Water Quality-Based Permitting for Toxic Pollutants.

7. The Sullivan pump station should not be listed as a CSO type discharge point. The Ankeny pump station should only be required to meet the "no discharge except in the case of excessive flows" permit requirement after 1993, since it is under a separate enforcement Order.

Department response: The Sullivan pump station will be removed from the permit as a CSO discharge point. Regarding the Ankeny pump station, the City is under an Order to upgrade the control system at the pump station by 1993. The permit states that discharges are prohibited except when inflows exceed the maximum pumping capacity, at which time it is expected to meet the standards applied to CSO's. These requirements remain in effect regardless of the presence of an Order, and should properly remain in the permit.

8. A definition of "verification" as it refers to flow meter calibration should be given.

Department response: The manufacturers recommendations for the flow meter should be followed.

9. Quantity of chlorine used should not be a required reporting requirement, since it is not a performance parameter. No justification is given for requiring this parameter be monitored.

Department response: The Department requires that the total pounds of chlorine be monitored, and most if not all permittees keep track of this information, for several reasons. A sudden increase in chlorine usage can indicate a leak in the chlorinator or feed system. Chlorine gas is a highly toxic substance that can be a significant safety threat to workers. In addition, a sudden increase in chlorine usage can indicate a problem with the chlorine residual test. The fecal coliform test will show if too little chlorine is used, but will not indicate if too much chlorine is used. Variations in chlorine feed rates can also furnish an insight into nitrification levels in the treatment plant.

10. The requirement for calculating average toxics removal should include a description of how to include a value of "none detectable". Also, the annual average toxics removal should be calculated by averaging the individual sample days percent

removal, rather than using the annual average toxics in and toxics out.

Department response: We have received a change in procedures from EPA since the permit was drafted. The new language has been put in the revised permit. It allows averaging of three consecutive days test results, which should resolve the City's concerns in this matter. A "none detectable" level should be reported as the detection level of the test for the pollutant.

11. Volatile solids reduction should be calculated for the entire digester complex, not for each individual digester. Portland's digesters are complete mix systems and calculating volatile solids reduction for the entire complex makes more sense and is consistent with federal guidance.

Department response: Volatile solids reduction is calculated to insure that pathogens that may be in the sludge are destroyed. The purpose of requiring each digester be tested is to insure that each is performing adequately to reduce pathogens. An average value for all digesters will not insure that the sludge produced meets standards for pathogen reduction, if in fact one or more of the digesters is not performing adequately.

12. The monthly monitoring reports should not include the location of each sludge disposal site, since this information is required to be kept at the plant site and is available for inspection.

Department response: We agree, and this requirement is dropped from the permit. However, the reporting requirement for gallons per day sludge and method of disposal is retained, and should be reported on the monthly report.

13. A wording change is requested to make clear that only breakdowns that result in bypassing should be reported, rather than all equipment breakdowns.

Department response: We are not interested in all breakdowns, but we are interested in more than just those that actually result in a bypass. Those breakdowns that are likely to result in bypasses, overflows, or effluent violations are of interest to the Department. The wording will be revised to reflect the type of reporting the Department needs.

14. The requirement for an amended sludge management plan should be included in Schedule D, not Schedule C.

Department response: Technically, this requirement is not a schedule since there is only one date, so we will take this condition out of the section labeled "Compliance Schedules" and put it in Schedule D, labeled "Special Conditions".

15. No justification is given for the frequency of bioassays. These are expensive tests and should not be required if initial testing indicates no toxicity.

Department response: Nationally, tests on municipal sewage treatment plants having significant industrial dischargers have indicated some problems with toxics passing through and being discharged to surface waters. All municipalities having formal federal pretreatment programs are required by EPA to conduct bioassay tests. It is the Department's intent to review the first few years test results, and may propose to EPA that the frequency of testing be altered based on the exhibited toxicity or lack thereof.

16. A mixing zone analysis should not be required on outfall 002, since it is used so infrequently (hasn't been used for the last few years). In addition, it is only used during extremely wet weather, when conducting a mixing zone study would be very difficult. Also, the time allowed for the mixing zone study on outfall 001 is much too short, since the City will have to go out for bid and the study needs to be done in the summer.

Department response: An additional year is given to complete the mixing zone on outfall 001, and the requirement for a mixing zone analysis on 002 is dropped.

17. It will be difficult to demonstrate compliance for each CSO within 12 months, as required in the Order, since the design standard is for no overflows except in a ten year or greater storm event.

Department response: It is true that the only real life proof of compliance will be to wait for a ten year summer storm and see if there is an overflow that violates water quality standards. However, there are other means of demonstrating that this standard can be met, such as computer simulation. The one year period will also allow the Department and City to see if overflows occur during that year's peak event.

18. The stipulated penalties are too little (it is cheaper for the City to pay the penalty than to comply); conversely, the

penalties are too great (if the City misses one construction season it will cost \$2.5 million).

Department response: The Department much prefers that limited resources be spent on solving water quality problems, not in paying penalties. However, the level of penalty needs to be set high enough to insure that it does not become cheaper to pay fines than to comply. Assuming \$500 million for the entire project, with 56 overflow points, and assuming 8% interest, then the fine per overflow point per day would have to exceed \$1957 to equal the cost of the City not spending the money [ $(\$500 \text{ million} \times .08) / (56 \text{ overflows} \times 365 \text{ days/year}) = \$1957$ ]. The proposed \$2500 is appropriate.

If events occur that are truly beyond the reasonable control of the City, and a delay in completing construction occurs, then the Department would be willing to grant an extension. However, our expectation is that the City will meet the twenty year schedule in controlling the discharges.

19. The permit is illegal because it does not include conditions requiring the CSO's meet technology based standards.

Department response: It is true that the permit does not include technology based standards for the CSO's, and that technically it should. The permit does include a requirement that the CSO's must meet Oregon water quality standards, and this standard is much more stringent than the technology based standards. However, the Department will change the permit to include the technology based standards for CSO's.

20. The Department is only issuing the permit to shield the City from a lawsuit, and is rushing the whole permit process.

Department response: The Department is issuing the permit and Order because that is required to fulfill our responsibilities in protecting water quality. It may be that issuing the permit and Order will affect the lawsuit, however that is not why we are doing it. We are neutral in the lawsuit that has been filed. Regarding the term "rushing", the permit has been in the draft stage since early December, 1990, and has been expired for almost two years. This is not a rushed job.

21. The permit extends the compliance deadline past those allowed in the Clean Water Act.

Department response: The permit does not extend the compliance deadline for the CSO's beyond those allowed. It does include a schedule for preparation of a facility plan,



but not for complying with the Clean Water Act. The schedule for the facilities plan is redundant to that included in the Order, however, and the Department is proposing to take that out of the permit and put it in the Order.

22. The permit is illegal because each CSO is not described and limited.

Department response: We disagree. Each CSO is listed on the front page of the permit as to location, and each CSO is required to meet water quality standards and technology based standards.

23. Pump station bypasses should meet EPA requirements for 24 hour notification, and the City must demonstrate that no feasible alternatives to bypassing exist.

Department response: The pump station overflows are not "bypasses" according to EPA definitions, and therefore do not have to meet the federal requirements for bypasses. EPA defines bypasses as occurring only at sewage treatment plants, not in pump stations or the collection system.

24. It is illegal to include the CSO's that discharge to the Columbia Slough in the permit, since the Columbia Slough is a water quality limited stream.

Department response: Nothing in our rules prevent issuing a permit for discharges to water quality limited streams.

25. The Order should be more explicit as to what types of circumstances are beyond the reasonable control of the City, and could result in time extensions.

Department response: The language included in the Order lists a number of examples, including acts of nature, unforeseen strikes, and so on. The Department wishes to retain flexibility in determining what is beyond the reasonable control of the City.

26. The permit should be denied until the City is in full compliance with all standards and limitations.

Department response: Under federal and state law, the existing permit (which expired in 1989) remains in effect until a new permit is issued. The proposed permit includes many additional testing and reporting requirements, as well as additional performance requirements not included in the existing permit. We believe that issuing the proposed permit will result in better protection of the environment.

27. The permit implies that all discharges that are occurring are in compliance, when in reality the CSO discharges are in violation. The permit should reflect reality.

Department response: The permit includes all standards that the discharges are supposed to meet. We recognize that the CSO's do not meet these standards, and have drafted the Order to require that the City correct these violations. The Clean Water Act prohibits the inclusion of limits that do not comply with state or federal standards in NPDES permits.

28. The Willamette River and Columbia Slough should be listed along with the Columbia River as receiving streams.

Department response: On the second page of the proposed permit, there is a section marked "Receiving System Information". This is for internal DEQ use, and only covers the main discharge point from the Columbia Blvd treatment plant. The locations of the other discharge points, including CSO's, are shown on the first page of the permit.

29. Additional testing should be required for the CSO, pump station, and treatment plant outfalls.

Department response: The proposed permit includes a significant expansion of the monitoring required at the Columbia Blvd. treatment plant. In addition, the City will be sampling and evaluating the discharges from the CSO's, under conditions of the Order. The Department feels that this level of monitoring is adequate.

30. The term "excessive stormwater inflows", which is included in Condition A(1)(a)(3), should be quantified.

Department response: This is quantified in this condition. Whenever the flows exceed 100 MGD, the alternate limits apply.

31. Monitoring should be required on outfall 002 in addition to outfall 001.

Department response: Outfall 002 is only used under extreme conditions, when the river is very high and flows into the treatment plant are also high. Outfall 002 has not been used in the last two years. It is because of the infrequency of the discharge that monitoring requirements were not put on the discharge point.

Technically, however, the commenter is correct. Monitoring is required for each discharge point. The permit will be revised to include 002 in the monitoring requirements.

32. Limits should be put in the permit for whole effluent toxicity, with daily and monthly limits measured in toxicity units.

Department response: Oregon rules for toxicity are not in terms of toxicity units, and including such limits would not be appropriate. Oregon rules do include limits for chronic and acute toxicity, and the proposed permit requires the City to conduct tests to demonstrate compliance with Oregon's rules.

33. The City should be required to include on monthly reports a description of sludge brought to the plant from outside of the City of Portland.

Department response: Many cities take sludge from a variety of sources, including septic tank pumpers and other cities that may not have adequate sludge handling facilities. We are interested in the treated sludge that leaves the plant, not the characteristics of raw sludge. The Department requires the City monitor and record the amount and characteristics of digested sludge, and also the manner and location of sludge disposal. No further monitoring is warranted.

34. Nine months is too long for submittal of bioassay test procedures.

Department response: The bioassay testing is not due to start until after the dilution analysis and mixing zone study are completed. The bioassay results are used with the dilution analysis to evaluate compliance with Oregon's toxicity rules. There is no point in requiring the bioassay test procedures any sooner, since the mixing zone study will not be completed.

35. The mixing zone study should require both a computer model and dye study to verify.

Department response: The Department is requiring that the proposed mixing zone study be submitted for approval. We will review the proposal at that time and will require that an adequate mixing zone study be done.

36. If the mixing zone study indicates toxicity violations for

chlorine, then the Department should direct the City to correct the problem.

Department response: As indicated in the permit and public notice, the Department will "re-open" the permit to include lower permit limits for chlorine if such lower limits are required to comply with toxicity limits. If the Department feels that the lower chlorine limits might result in violations of the disinfection requirements, then we will direct the City to construct the necessary improvements through a separate Stipulation and Final Order.

37. Chlorine residual levels should be 0.011 and 0.019 ug/l, not mg/l.

Department response: The chlorine residual levels required are 11 and 19 ug/l, which is mathematically equivalent to .011 and .019 mg/l. The chlorine residual levels in the permit are correct.

38. DEQ should become the depository for the City's pretreatment program records after three years, if the City chooses to dispose of them.

Department response: The Department requires that the City submit annual reports, which we keep in official state archives for a long time. We don't want the City's detailed records.

39. The Department is proposing to limit CSO discharges to not violate water quality standards outside of the designated mixing zone. This does not meet the requirements of 40 CFR 122.44. Numeric discharge standards are required, and the Department does not have the necessary information to set these limits or issue the permit.

Department response: We disagree. The limits as proposed fully and completely protect water quality standards as required in 40 CFR 122.44. By definition, if the CSO discharges meet this standard, then water quality standards will be met. 40 CFR 122.45(e) requires that non-continuous discharges be limited "as appropriate". The Department believes the limits as proposed are appropriate and fully comply with federal and state law.

40. Note 1 on page five of the proposed permit in effect permits the CSO discharges, and incorporates by reference the Order. This is a violation of the Clean Water Act.

Department response: While the Department disagrees with this analysis, we agree that it could cause confusion. The note does not add anything to the permit and we will delete it.

41. Inclusion of the compliance schedule for the facilities plan is improper, as it extends the schedule for compliance of the CSO's past the statutory deadline.

Department response: The facilities plan is a study only, and as such can be included in the permit. The Department is not authorizing violations by the CSO's in the permit by including a requirement for a study. However, it is somewhat redundant with the requirements in the Order, and will be taken out. The Order will be modified to include the detailed information about facilities plan content.

42. The proposed permit does not require notification of bypassing within 24 hours as required by EPA.

Department response: The general conditions include a requirement that DEQ be notified within 24 hours of bypassing.

#### Sewage Treatment Plant Operation/Odors/Sludge

1. The permit should not be issued because the treatment plant is poorly managed.

Department response: Over the past two to three years, the Department has noticed significant improvements in the operation of the treatment plant. The Department believes the treatment plant is well operated, and that operations now are better than they were three years ago.

2. The City's pump stations are not reliable.

Department response: The Department agrees that the City's pump stations have not been as reliable as we would like. Of greatest concern is the reliability of the Sullivan and Ankeny pump stations, but we are also concerned about approximately 35 other pump stations that could discharge sewage if they failed. With regard to the Ankeny and Sullivan pump stations, the City and Department signed a Stipulation and Final Order in 1989 that requires the City to replace the control systems in both pump stations, and provide backup power. Backup power may be provided by connecting the stations to two electrical grids; this is an acceptable method for providing backup power to major installations such as sewage treatment plants and large pump

stations. The City has also improved its pump station maintenance program and its ability to respond to pump station failures after hours.

3. The City should not chlorinate the treatment plant effluent. Chlorine is known to be toxic to aquatic biota at low concentrations.

Department response: The Department agrees that chlorine discharges should be controlled to prevent toxicity. To achieve this, a condition has been placed in the permit that requires the City to determine the highest chlorine concentration that should be allowed in the effluent in order to prevent toxicity. The City and Department both realize that controlling chlorine concentrations may require that new facilities be built at the treatment plant. The Department will not require that chlorine usage be discontinued at this time, since disinfection of the treated effluent is required to meet permit limits for bacteria.

4. The treatment plant stinks, its a nuisance. It lowers property values and lowers the quality of life of neighbors.

Department response: The Department recognizes that all sewage treatment plants have some odors. The Department has the authority to require that actions be taken to reduce odors if we determine that odors are creating a "nuisance condition". We received about ten complaints in 1990, but we have not determined that the treatment plant is creating a nuisance condition.

It is our understanding that the City has conducted an odor survey at the treatment plant and is planning to take steps to reduce odors. We believe the best approach at this time is for the City to move forward and for citizens concerned about odors to work with the City.

If a significant number of odor complaints are received, they will be investigated, and if we determine that the treatment plant is creating a nuisance condition, we will require measures to reduce odors.

5. There are two outfalls to the Columbia Slough that should also be listed in the permit (the two outfalls in question are an emergency discharge line from the treatment plant, and a pump sump drain line from the lagoon pump building).

Department response: Neither of these outfalls is listed because discharges from them are prohibited. Outfalls are listed in Oregon NPDES permits only when the outfall is

expected to be used on a regular, predictable basis. The emergency outfall would only be used if the plant were unable to discharge all effluent through the normal treatment plant outfalls, for example during an extended power outage with high flows in the plant. The pump sump drain line is intended to allow cleaning of the lagoon pump sump, but Department staff informed the treatment plant staff that no discharges from the pump sump are allowed.

6. Some Combined Sewer Overflows have numbers such as 53A and 53B; these are not listed in the permit.

Department response: The Department has listed all the Combined Sewer Overflows that we know exist, based on information supplied by the City. The outfalls are listed by the number in the permit and the location of the Combined Sewer Overflow. The permit numbers do not correspond to the City's numbering system.

7. Triangle Lake sludge lagoon should be done away with. It adversely affects Smith and Bybee Lakes.

Department response: The Department does not have the authority to require abandonment of the lagoon; however, we do have the authority to require groundwater monitoring to determine if the lagoon is causing a problem. A groundwater characterization and monitoring program are required by the proposed permit. If the groundwater monitoring shows that the lagoon is violating Oregon's groundwater rules, the City will be required to take corrective measures.

8. The sludge produced is highly toxic, and is disposed of in an unsafe manner.

Department response: We disagree. Sludge from sewage treatment plants that serve areas with a significant number of industries typically contains some small amounts of metals and other toxic materials. Portland's sludge is no exception. However, EPA has done extensive studies of municipal treatment plant sludges and has found that they can be safely and beneficially used as a soil amendment and fertilizer, if certain precautions are followed. Most municipal sludges in Oregon are spread on pastures, grain fields, or grass fields.

The Department requires that the City conduct regular tests on the sludge produced, for a variety of pollutants including heavy metals. The Department requires that each individual site to be used for sludge spreading be studied, and a description filed of the crop, soils, nearby waterways,

Memo to: Lydia Taylor  
April 25, 1991  
Page 29

nearby wells, and so forth. No site can be used without Department approval. The limitations on crop allowed, setback distances, and the maximum amount of sludge that can be safely spread at any one site are set by the Department.

Portland also produces compost from sludge, which is sold for use to the general public. The Department requires that the compost comply with a sludge management plan, primarily to insure that pathogenic organisms are reduced to safe levels. Dioxin, in trace amounts, has also been found in Portland's sludge. The Oregon Health Division, working with EPA and the Department, has determined that the compost is safe for public use provided the dioxin levels do not exceed certain limits. If the limits are exceeded, compost sales must be restricted or halted, depending on the levels. The compost must also carry a label recommending the compost be used only on ornamental plants.

We recognize that once compost has been sold, neither the Department nor the City has any control over how it is used. However, we believe that use of the compost is safe, and we support efforts to make a useful, recycled product from a waste material.



Expiration Date: 3-31-96

Permit Number:

File Number: 70725

Page 1 of 21 Pages

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
WASTE DISCHARGE PERMIT**

Department of Environmental Quality  
811 S.W. Sixth Avenue  
Portland, OR 97204  
Telephone: (503) 229-5696

Issued pursuant to ORS 468.740 and The Federal Clean Water Act

**ISSUED TO:**

**SOURCES COVERED BY THIS PERMIT:**

City of Portland  
1120 S.W. Fifth Avenue  
Portland, Oregon 97204

<u>Type of Waste</u>	<u>Outfall Number</u>	<u>Outfall Location</u>
Domestic Sewage	001	RM 105.5 (Col. R.)
Domestic Sewage	002	RM 105.5 (Col. R.)

Combined Sewer Overflows 003 - 056,

to Willamette River (Will. R.) and Columbia Slough (Col. Slough), as follows:

S.W. California St.	003 (Will. R.)	S.E. Yamhill St.	030 (Will. R.)
S.W. Taylors Fy. Rd.	004 (Will. R.)	S.E. Alder St.	031 (Will. R.)
S.W. Carolina St.	005 (Will. R.)	S.E. Stark St.	032 (Will. R.)
S.W. Seymour St.	006 (Will. R.)	S.E. Oak St.	033 (Will. R.)
S.W. Lowell St.	007 (Will. R.)	N.E. Glisan St.	034 (Will. R.)
S.W. Woods St.	008 (Will. R.)	N.E. Holladay St.	035 (Will. R.)
S.W. Sheridan St.	009 (Will. R.)	N. Wheeler Pl.	036 (Will. R.)
S.W. Mill St.	010 (Will. R.)	N. Randolph Ave.	037 (Will. R.)
S.W. Jefferson St.	011 (Will. R.)	N. Beech St.	038 (Will. R.)
N.W. 9th Ave. (Tanner Creek)		Riverside (Swan Island)	
	012 (Will. R.)		039 (Will. R.)
N.W. 14th Ave.	013 (Will. R.)	N. Van Houten Pl.	040 (Will. R.)
N.W. 15th Ave.	014 (Will. R.)	N. Van Buren Ave.	041 (Will. R.)
N.W. Nicholai St.	015 (Will. R.)	N. Salem Ave.	042 (Will. R.)
N.W. 29th Ave. (Balch Gulch)		N. Alta Ave.	043 (Will. R.)
	016 (Will. R.)	N. Reno Ave.	044 (Will. R.)
Guilds Lake	017 (Will. R.)	N. James St.	045 (Col. Slough)
Glen Harbor	018 (Will. R.)	N. Oswego Ave.	046 (Col. Slough)
N.W. 110th Ave.	019 (Will. R.)	N. Oregonian Ave.	047 (Col. Slough)
S.E. Clatsop St.	020 (Will. R.)	N. Fiske Ave.	048 (Col. Slough)
Garthwick (Waverly)	021 (Will. R.)	N. Chatauqua Pl.	049 (Col. Slough)
S.E. Umatilla St.	022 (Will. R.)	N. Bayard Ave.	050 (Col. Slough)
S.E. Insley St.	023 (Will. R.)	N. Delaware Ave.	051 (Col. Slough)
S.E. Woodward St.	024 (Will. R.)	N. Fenwick Ave.	052 (Col. Slough)
S.E. Taggart St.	025 (Will. R.)	N. Albina Ave.	053 (Col. Slough)
S.E. Division Pl.	026 (Will. R.)	N. Vancouver Ave.	054 (Col. Slough)
S.E. Harrison St.	027 (Will. R.)	N. Willis Blvd	055 (Col. Slough)
S.E. Clay St.	028 (Will. R.)	N.E. 13th Ave.	056 (Col. Slough)
S.E. Hawthorne Blvd.	029 (Will. R.)		

Combined Sewer/Pump Station Overflow[s] 057[- 058],  
to Willamette River (Will. R.) [and Columbia Slough (Col. Slough)], as follows:

Ankeny Pump Sta. 057 (Will. R.) [Sullivan Pump Sta. 058 (Will. R.)]

**PLANT TYPE AND LOCATION:**

Activated Sludge STP  
5001 N. Columbia Blvd.  
Portland, Oregon  
Treatment System Class: IV  
Collection System Class: IV

**RECEIVING SYSTEM INFORMATION:**

Basin: Willamette  
Sub-Basin: Lower Col./Willamette  
Stream: Columbia River  
Hydro Code: 10--COLU 105.5 D  
County: Multnomah

**EPA REFERENCE NO:** OR002690-5

Issued in response to Application No. 998767 received 2-9-89.

This permit is issued based on the land use findings in the permit record.

-----  
Lydia R. Taylor, Administrator

-----  
Date

**PERMITTED ACTIVITIES**

Until this permit expires or is modified or revoked, the permittee is authorized to construct, install, modify, or operate a wastewater collection, treatment, control and disposal system and discharge to public waters adequately treated wastewaters only from the authorized discharge point or points established in Schedule A and only in conformance with all the requirements, limitations, and conditions set forth in the attached schedules as follows:

	<u>Page</u>
Schedule A - Waste Disposal Limitations not to be Exceeded...	3-5
Schedule B - Minimum Monitoring and Reporting Requirements...	6-11
Schedule C - Compliance Conditions and Schedules.....	12-17
Schedule D - Special Conditions.....	18-19
Schedule E - Pretreatment Conditions.....	20-21
General Conditions.....	Attached

Each other direct and indirect discharge to public waters is prohibited.

This permit does not relieve the permittee from responsibility for compliance with any other applicable federal, state, or local law, rule, standard, ordinance, order, judgment, or decree.

SCHEDULE A

1. Waste Discharge Limitations not to be Exceeded After Permit Issuance.

- a. Outfall Number 001 and 002 (Sewage Treatment Plant Discharge)  
(Outfall 001 shall be the primary Outfall and discharges from Outfall 002 shall be minimized; however, when plant flow, river stage or necessary maintenance activities limit discharge capacity at Outfall 001, discharge at Outfall 002 may occur).

(1) Year-round

<u>Parameter</u>	<u>Average Effluent Concentrations</u>		<u>Monthly*</u>	<u>Weekly*</u>	<u>Daily*</u>
	<u>Monthly</u>	<u>Weekly</u>	<u>Average</u>	<u>Average</u>	<u>Maximum</u>
	<u>lb/day</u>	<u>lb/day</u>	<u>lb/day</u>	<u>lb/day</u>	<u>lbs</u>
a. BOD-5	30 mg/l	45 mg/l	25,000	37,500	50,000
b. TSS	30 mg/l	45 mg/l	25,000	37,500	50,000
c. FC/100ml	200	400			

\*Based on average dry weather design flow to the facility equaling 100 MGD.

(2) Other parameters

- a. pH                                Shall be within the range 6.0 - 9.0
- b. BOD and TSS                     (May 1 through October 31)  
Removal Efficiency                Shall not be less than 85 percent monthly average.
- (November 1 through April 30)  
(Shall not be less than 80 percent monthly average for BOD and not less than 75 percent monthly average for TSS.)
- When, because of storm water flows, the total flow entering the treatment facility exceeds 100 MGD, the percentage of BOD and suspended solids removed by the treatment facility may be less than 85%. During these periods, the treatment facility shall be operated as efficiently as practicable.
- c. Chlorine residual                Shall not exceed 1.5 mg/l

- (3) When, because of excessive storm water inflows, the monthly average flow entering the treatment facility exceeds 100 MGD, the

pounds discharged may exceed the limits established in Condition 1.a. above. During those periods the amount of BOD-5 and Suspended Solids discharged shall not exceed a monthly average of 50,000 lb/day each, or a weekly average of 75,000 lb/day each; or a daily maximum of 100,000 pounds each.

- (4) Notwithstanding the effluent limitations established by this permit, no wastes shall be discharged and no activities shall be conducted which violate Water Quality Standards as adopted in OAR 340-41-445 except in the defined mixing zones:

The mixing zones shall consist of a 100 foot radius from the points of discharge.

- b. Outfalls Number 003 through 044 (Combined Sewer Overflows to the Willamette River)

[(1) The overflow from these diversion structures shall be minimized as much as practicable at all times. A diversion structure is a part of a combined sewer system which diverts sanitary sewage or combined sanitary/storm sewage into another sewer line which conveys the sewage to the treatment works; when the combined sanitary/storm sewage flow exceeds the capacity of the diversion structure, the excess sewage overflows the diversion structure and is either discharged from an outfall or conveyed to another diversion structure where the process is repeated.]

(1[2]) [Notwithstanding the effluent limitations established by this permit, n]No wastes shall be discharged and no activities shall be conducted which violate Water Quality Standards as adopted in OAR 340-41-445, [except in the defined mixing zones (See Note 1):

The mixing zones shall consist of a 100 foot radius from the points of discharge.]

- c. Outfalls Number 045 through 056 (Combined Sewer Overflows to the Columbia Slough)

[(1) The overflow from these diversion structures shall be minimized as much as practicable at all times. A diversion structure is a part of a combined sewer system which diverts sanitary sewage or combined sanitary/storm sewage into another sewer line which conveys the sewage to the treatment works; when the combined sanitary/storm sewage flow exceeds the capacity of the diversion structure, the excess sewage overflows the diversion structure and is either discharged from an outfall or conveyed to another diversion structure where the process is repeated.]

(1[2]) [Notwithstanding the effluent limitations established by this permit, n]No wastes shall be discharged and no activities shall be conducted which violate Water Quality Standards as adopted in OAR 340-41-445, [except in the defined mixing zones (See Note 1):

The mixing zones shall consist of a 100 foot radius from the points of discharge.]

d. Outfall[s] Number 057 [and 058] (Ankeny [and Sullivan] Pump Station[s])

- (1) Discharges to state waters from Ankeny [and Sullivan] pump station[s] are prohibited except when inflows exceed the maximum capacity[ies] of the station[s] to pump sewage to the treatment works.
- (2) [Notwithstanding the effluent limitations established by this permit, n]No wastes shall be discharged and no activities shall be conducted which violate Water Quality Standards as adopted in OAR 340-41-445 [except in the defined mixing zones (See Note 1)]:

The mixing zones shall consist of a 100 foot radius from the points of discharge.]

[Note 1: The Department recognizes that water quality standards will not be maintained outside of the designated mixing zone for the Combined Sewer Overflows and combined sewer pump stations overflows when this permit is issued. However, the Department will be addressing the CSOs in a Stipulation and Final Order which will include a corrective action plan and schedule for complying with Water Quality Standards adopted in OAR 340-41-445.]

e. Outfalls Number 003 through 057

All discharges from outfalls number 003 through 057 shall meet the following technology based limitations:

(1) Operation and maintenance of combined sewer systems

(A) Each diversion structure shall be inspected on a weekly basis. Any observed defect in a diversion structure that could result in increased discharges to surface waters shall be repaired within 14 working days.

(B) The collection system operation and maintenance shall be supervised by a person holding a current Oregon Class IV Certificate for Collection System Operation.

(C) The permittee shall institute an adequate operation and maintenance program for their entire sewage system. Maintenance records shall be maintained on all major electrical and mechanical components of the sewage system and pumping stations. Such records shall clearly specify the frequency and type of maintenance recommended by the manufacturer and shall show the frequency and type of

maintenance performed. These maintenance records shall be available for inspection by the Department at all times.

- (2) The permittee shall maximize the in-line collection system storage and maximize flow to the treatment plant as follows: all dams installed at diversion structures shall be maintained at their current heights (as of the date of permit issuance) or greater.
- (3) All significant industries having pretreatment permits issued by the permittee shall be inspected twice per year. The permittee shall collect and analyze effluent samples from the categorical industrial dischargers on a quarterly basis. Any violations of federal pretreatment rules or applicable city pretreatment ordinances will be prosecuted in accordance with the permittee's Department approved enforcement program.
- (4) After March 31, 1996, no discharges during dry weather are allowed. Dry weather is defined as a time when it is not raining and has not rained in the Portland metropolitan area for the previous eight hours.

**SCHEDULE B**

1. Minimum Monitoring and Reporting Requirements.  
 (unless otherwise approved in writing by the Department)

a. Influent

<u>Item or Parameter</u>	<u>Minimum Frequency</u>	<u>Type of Sample</u>
Total Flow (MGD)	Daily	Flow meter
Flow Meter Calibration	Quarterly	Verification
BOD-5	Daily	Composite
TSS	Daily	Composite
pH	Daily	Grab
TOXICS:		
Metals: (Ag, As, Cd, Cr, Cu, Hg, Ni, Pb, Zn) and Cyanide (CN), measured as total in mg/l (See note 1/)	Monthly using 3 consecutive days between Monday and Friday, inclusive	24-hr daily composite (See note 2/)
Priority pollutant scan	Quarterly	Composite (See Note 11/)
Total Phenols (See Note 1/)	Monthly using 3 consecutive days between Monday and Friday, inclusive	24-hr daily composite (See note 2/)
Other parameters:		
Dioxin (See Note 3/)	Quarterly	24-hr composite
Thorium 232	Quarterly	24-hr composite

b. Outfalls Number 001 and 002 (sewage treatment plant outfalls)

<u>Item or Parameter</u>	<u>Minimum Frequency</u>	<u>Type of Sample</u>
BOD-5	Daily	Composite
TSS	Daily	Composite
pH	Daily	Grab
Fecal Coliform	Daily	Grab
Quantity Chlorine Used	Daily	Measurement
Chlorine Residual	Daily	Grab
Average Percent Removed (BOD and TSS)	Monthly	Calculation



NUTRIENTS:

NH <sub>3</sub> -N, NO <sub>2</sub> +NO <sub>3</sub> -N, TKN, Total Phosphate-P (in mg/l)	Weekly between May & October	Composite
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TOXICS:

Metals: (Ag, As, Cd, Cr, Cu, Hg, Ni, Pb, Zn) and Cyanide (CN), measured as total in mg/l (See note 1/)	Monthly using 3 consecutive days between Monday and Friday, inclusive	24-hr daily composite (See note 2/)
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<u>Priority Pollutant Scan</u>	<u>Quarterly</u>	<u>Composite</u> (See note 11/)
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Total Phenols (See Note 1/)	Monthly using 3 consecutive days between Monday and Friday, inclusive	24-hr daily composite (See note 2/)
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Toxics Removal	Annually	Calculation (See Note 4/)
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Biomonitoring	Bioassay of effluent from Outfall 001 every month between May 1 and Oct. 31 and once between Nov. 1 and April 30.	Acute and chronic bioassay.
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Other parameters:		
Dioxin (See Note 3/)	Quarterly	24-hr composite
Thorium 232	Quarterly	24-hr composite

c. Sludge Management

<u>Item or Parameter</u>	<u>Minimum Frequency</u>	<u>Type of Sample</u>
Sludge analysis including: Total solids (% dry wt.) Volatile solids (% dry wt.) Volatile Suspended Solids (% Dry Wt.) Sludge nitrogen NH <sub>3</sub> -N; NO <sub>3</sub> -N; & TKN (% dry wt.) Sludge metals content for Ag, As, Hg, Pb, Zn, Cu, Ni, Cr, Cd (in mg/kg dry weight) Phosphorus (% dry wt.) Potassium (% dry wt.) pH (standard units)	Monthly	Composite sample to be representative of the final belt pressed product. (See Note 5/)
Other parameters: Thorium 232 Dioxin (See note 6/)	Monthly Monthly low resolution, and quarterly high resolution.	Composite sample to be representative of the final belt pressed product. (See Note 5/)
<u>Priority pollutant scan</u>	<u>Quarterly</u>	<u>Grab</u> (See Note 11/)
Record of % volatile solids reduction accomplished through digestion	Monthly	Calculation (See Note 7/)
Amount of Compost Produced	Monthly	Measurement
Compost Inventory	Annually	Measurement (See Note 8/)
Record of locations where sludge is applied on land (Site location map to be maintained at treatment facility for review upon request by DEQ; <u>volume and</u>	Each Occurrence	Date, volume & locations where sludges were applied recorded on site location

date of sludge application map.  
to be included on monthly report.)

- d. Groundwater (Compost storage area east of and adjacent to treatment plant, and after April 1, 1993, the Triangle Lake sludge lagoon area)

Water level (See Note 9/)	Quarterly, Feb., May, Aug. & Nov.	Measurement
Color	Quarterly, Feb., May, Aug. & Nov.	Grab
Turbidity	Quarterly, Feb., May, Aug. & Nov.	Grab
Chloride	Quarterly, Feb., May, Aug. & Nov.	Grab
NO <sub>2</sub> -N	Quarterly, Feb., May, Aug. & Nov.	Grab
NO <sub>3</sub> -N	Quarterly, Feb., May, Aug. & Nov.	Grab
Sulfate	Quarterly, Feb., May, Aug. & Nov.	Grab
Metals (Ag, As, Hg, Pb, Zn, Cu, Ni, Cr, Cd)	Annually in August	Grab
Priority Pollutants (See Note 10/)	Annually in August	Grab

Notes:

- 1/ For influent and effluent cyanide and phenol samples, at least eight (8) discrete grab samples shall be collected over the operating day. Each aliquot shall not be less than 100 ml and shall be collected and composited into a larger container which has been preserved with sodium hydroxide for cyanide samples, and sulfuric acid for total phenols samples.
- 2/ Daily 24-hour composite samples shall be analyzed and reported separately.
- 3/ Dioxin analyses shall include all of the following chlorinated dibenzodioxins and dibenzofurans: 2,3,7,8-TCDD, 2,3,7,8-PeCDD, 2,3,7,8-HxCDD, 2,3,7,8-HpCDD, OCDD, 2,3,7,8-TCDF, 1,2,3,7,8-PeCDF, 2,3,4,7,8-PeCDF, 2,3,7,8-HxCDF, 2,3,7,8-HpCDF, OCDF. The analytical results shall be expressed both in terms of the concentrations of the individual compounds and in terms of the Toxic Equivalency Factors (TEFs) relative to 2,3,7,8-TCDD using the weighting factors in EPA/625/3-89/016, published March, 1989. The analytical procedure must be capable of measurements in the low parts-per-quadrillion range.

- 4/ [Total plant removal rates shall be calculated by first averaging all influent concentrations for a parameter obtained over the year; second averaging all effluent concentrations for a parameter obtained over the year; and finally using these two average concentrations to calculate the parameter's total plant removal.] Plant removal rates shall be calculated for each 3-day sampling event. Removals shall be calculated by: (1) averaging the three influent concentration values for each parameter collected during the sampling event; (2) averaging the three effluent concentration values for each parameter collected during the sampling event; and (3) using the two average concentrations to calculate the parameter's removal. The removals for each 3-day sampling event as well as monitoring data for each day of sampling shall be reported.
- 5/ Composite samples from the belt presses shall consist of at least 6 aliquots of equal volume collected over a 24 hour period and combined.
- 6/ Dioxin analyses shall include all of the following chlorinated dibenzodioxins and dibenzofurans: 2,3,7,8-TCDD, 2,3,7,8-PeCDD, 2,3,7,8-HxCDD, 2,3,7,8-HpCDD, OCDD, 2,3,7,8-TCDF, 1,2,3,7,8-PeCDF, 2,3,4,7,8-PeCDF, 2,3,7,8-HxCDF, 2,3,7,8-HpCDF, OCDF. The analytical results shall be expressed both in terms of the concentrations of the individual compounds and in terms of the Toxic Equivalency Factors (TEFs) relative to 2,3,7,8-TCDD using the weighting factors in EPA/625/3-89/016, published March, 1989. The high resolution analytical procedure must be capable of detecting the individual compounds listed and measuring them in the low parts-per-trillion range. The low resolution analytical procedure need not be capable of detecting the individual compounds listed; a gross measurement of total dioxins/dibenzofurans is acceptable. The quarterly high-resolution analysis must be done on the same sample as the corresponding monthly low-resolution analysis to determine if the results can be correlated.
- 7/ Calculation of the % volatile solids reduction is to be based on comparison of a representative grab sample of total and volatile solids entering each digester and a representative grab sample of sludge solids exiting each digester withdrawal line.
- 8/ An inventory of compost as of December 15 of each year will be reported with the December Discharge Monitoring Report, and shall include all compost that has not been sold or otherwise transferred to a user as of that date, no matter where the compost is stored.
- 9/ Groundwater level data shall be presented both in tabular form and on a site map showing monitoring well locations and identification.
- 10/ In Section 307(a) of the 1987 Clean Water Act.

11/ The permittee shall perform chemical analysis of its influent, effluent, and final sludge for all specific toxic pollutants listed in Table II of Appendix D of 40 CFR 122 in accordance with the sampling frequency in Schedule B. The influent and effluent samples shall be 24-hour daily composites, except where sampling volatiles and phenols. In this case, 6 discrete samples (not less than 100 ml) collected over the operating day are acceptable. The permittee shall take special precautions in compositing the individual grab samples for the volatile organics to insure sample integrity (i.e. no introduction to the outside air). Sludge samples shall be grab. Samples shall be collected during the operating week between Monday and Friday.

In addition to analyzing for pollutants specified in the above paragraph, the permittee shall make a reasonable attempt using GC/MS analytical techniques to identify and quantify the ten most abundant constituents of each effluent extract (excluding priority pollutants and unsubstituted aliphatic compounds) shown to be present by peaks on the total ion plots (reconstructed gas chromatograms) having more than ten times greater than the standard deviation of the area of the adjacent background noise. Identification shall be attempted through the use of the USEPA/NIH computerized library of mass spectra, with visual confirmation by an experienced analyst. Quantification may be an order-of-magnitude estimate based upon comparison with an internal standard. It must be recognized this is a screening tool and is not intended to be rigorous.

The results of the Priority Pollutant Scan analysis shall be submitted with the annual pretreatment report.

2. Reporting Procedures

Monitoring results shall be reported on approved forms. The reporting period is the calendar month. Reports must be submitted to the Department by the 15th day of the following month.

Monitoring reports (DMRs) shall include a record of the location, quantity and method of use of all sludge removed from the treatment facility and a record of all [applicable] equipment breakdowns that could result in bypasses of treatment units or overflows of untreated or partially treated sewage or permit violations [and bypassing].

**SCHEDULE C**

Compliance Schedules and Conditions

[1. By no later than 6 months after receipt of written notice from the Department, the permittee shall submit a sludge management plan or plan revision in accordance with Oregon Administrative Rule 340, Division 50, "Disposal of Sewage Treatment Plant Sludge and Sludge Derived Products Including Septage". Upon approval of the plan or plan revision by the Department, the plan shall be implemented by the permittee.]

1[2]. Bioassay.

- a. No later than nine (9) months after permit issuance, the permittee shall submit proposed bioassay test procedures for the Department's review and approval. The proposal shall include at least the following:
- (1) All bioassay tests must be conducted on 24-hour composite samples of the de-chlorinated final effluent diluted by appropriate control water.
  - (2) A chronic bioassay test conducted in 100%, 30%, 10%, 3%, and 1% of the final effluent and one control water sample using two species (one freshwater fish and one freshwater invertebrate) which are to be approved by the Department.
  - (3) An acute bioassay test conducted in 100 percent of the final effluent using the same two species as in the chronic bioassay test.
  - (4) A minimum of three replicates will be used in each of the tests.
- b. Following agreement between the permittee and the Department on appropriate test procedures, the permittee shall initiate bioassay testing on Outfall 001 in accordance with Schedule B and the approved test procedures. Any change in bioassay test procedures must be approved by the Department.
- c. The bioassay tests shall be conducted monthly between May and October, and once between November and April beginning in 1991, using the approved chronic and acute bioassay tests on the selected species. After 1991 and for the duration of the permit, testing shall be conducted monthly between May and October, and once between November and April, using the most sensitive test species approved by the Department.

3. By July 31, 1991, the permittee shall submit a written plan for evaluating the dispersion, mixing and dilution of effluent at Outfall[s] 001 [and 002]. The purpose of the study is to enable biomonitoring results on various effluent dilutions and effluent toxicity data to be related to actual mixing characteristics and available dilution. The evaluation shall also determine the ability of both outfalls to comply with the water quality standards for total chlorine residual (no more than 0.019 mg/l within the mixing zone and no more than 0.011 mg/l at the edge of the mixing zone).

Upon written approval of the Department, the plan shall be implemented and the results of the evaluation submitted to the Department by November 30, 1992[1]. The plan and final submittal must comply with the following:

- a. The dispersion, mixing and dilution determinations should be carried out through preferably a dye study or through an approved verified mathematical model.
- b. Dispersion, mixing and dilution must be evaluated under the following combination of conditions:
  - i. Tidal conditions that result in minimal or no seaward river flow or other critical low receiving stream flows which may exist;
  - ii. River flow not exceeding the mean summer low flow; and
  - iii. At the average dry weather design flow for the facility, as listed in this permit, if sufficient storage is available in the system to simulate this condition. If sufficient storage is not available, perform at the highest flow rate that can be obtained from existing storage, and extrapolate the results to the average dry weather design flow.
- c. If the evaluation concludes that water quality standards cannot be met for total chlorine residual, the permittee shall include with the submittal of the evaluation:
  - i. A plan and time schedule for upgrading or modifying wastewater control facilities to achieve compliance with water quality standards for total chlorine residual.
  - ii. A proposed chlorine residual limitation to be inserted into the permit that assures compliance with water quality standards.

The Department will reopen this permit to include an appropriate total residual chlorine limit if necessary to achieve compliance with water quality standards.



In addition, the Department is currently proposing to adopt new rules regarding establishment of a Zone of Immediate Dilution (ZID). If and when these or similar rules are adopted, this permit may be reopened and conditions added to comply with those rules. The information provided by this study may be used to help establish any new conditions.

4. The permittee shall perform a Minimum Hydrogeologic Characterization and have completed Preliminary Groundwater Monitoring for the Triangle Lake Sludge Lagoon area according to the following schedule:
  - a. By January 1, 1992, submit to the Department approvable plans for Minimum Hydrogeologic Characterization and Preliminary Groundwater Monitoring. Upon approval of the Plans by the Department, the plans shall be implemented by the permittee.
  - b. By April 1, 1993, submit the results of the Minimum Characterization using a Department approved format, install the approved monitoring well system, and initiate the Preliminary Groundwater Monitoring program.
  - c. After initiating the Groundwater Monitoring Program, water samples from the designated monitoring wells shall be:
    - (1) Collected quarterly;
    - (2) Analyzed by a laboratory approved by the Oregon State Health Division for Drinking Water Analysis, except for the Priority Pollutants; and
    - (3) Reported to the Department with an analysis of the meaning of the results.
  - d. The need for permit-specific concentration limits and ongoing groundwater monitoring efforts shall be evaluated by the Department at the time of permit renewal. Any corrective actions and/or additional monitoring shall be incorporated into the proposed permit at that time. However, during the term of this permit, should the data suggest that a groundwater discharge poses a significant threat, the Department may request corrective action by modifying this permit.
5. The permittee shall sample groundwater at the compost storage site immediately east of and adjacent to the treatment plant, as described under Schedule B of this permit, utilizing the existing wells that were installed in October of 1988. If these wells are no longer usable, the permittee shall install three new wells (3 monitoring wells, one of which may be used as a piezometer) by December 1, 1991, after which the monitoring.

requirements of Schedule B must be met. The Permittee shall notify the Department by July 31, 1991 whether the existing wells are usable or not. Groundwater monitoring at this location will be required until such time as the site is no longer used for compost storage, or until such time as an impervious surface with proper drainage control and leachate collection systems for compost storage is constructed.

In addition, by July 31, 1991, the permittee shall inform the Department of when it expects to cease using this site for compost storage. If this site is to be in use for compost storage after June 30, 1995, the compost must be stored on an impervious surface, and leachate collection and treatment systems must be provided.

16. The permittee shall prepare and submit an approvable facility plan to control CSO discharges. The facility plan shall include the following elements: 1) a characterization of the CSO discharges including volume, times discharge, and bacterial and chemical content (as listed in (a), below) of the discharges; 2) an evaluation of the impact on water quality from the existing discharges; 3) an evaluation of the minimum technology based limitations, and how they would be implemented for each CSO; 4) an evaluation of control measures required to eliminate any dry weather discharges; 5) an evaluation of other control measures that might be required to achieve compliance with water quality standards including separation of the sewer systems and treatment of each discharge point; 6) an analysis of the level of controls required to attain compliance with water quality standards; 7) a cost analysis of the control strategy required to attain continuous compliance with water quality standards; and 8) a proposed schedule for implementing recommended control measures. The permittee shall:

- a. By December 31, 1992, submit the results of a study to characterize Combined Sewer Overflow (CSO) discharges. The study shall include:

- (1) Development of a model or models to predict the quantity and quality of the CSO discharges under varying rainfall conditions (for the purpose of this condition, CSO discharges include discharges from CSOs and pump stations that overflow during normal operation/high influent flow conditions). The model(s) should be able to predict the volume, duration and quality of the discharge from individual CSOs, the combined discharge from all CSOs located on the Willamette River, and the combined discharges from all CSOs located on the Columbia Slough. The model(s) should also be able to predict the volume, duration and quality of discharges that could be achieved with the application of wastewater control and treatment technologies.

Water quality parameters to be modeled include, but are not limited to, carbonaceous BOD-5 (CBOD-5), Total Solids, Total Suspended Solids, Fecal Coliform and Enterococcus bacteria, Ammonia-nitrogen, plus those Metals (Ag, As, Cd, Cr, Cu, Hg, Ni, Pb and Zn) and Priority Pollutants listed in Section 307(a) of the 1987 Clean Water Act that are detected in samples at or above the water quality criteria levels listed in Oregon Administrative Rules Chapter 340, Division 41 or above the Department's proposed sediment guidelines.

- (2) Sufficient sampling to support the development of the models as well as to validate the applicability of the model(s) to all CSOs.
  - (3) Mixing zone evaluations on at least six (6) CSOs, four (4) on the Willamette River and two (2) on the Columbia Slough. The CSOs selected for the mixing zone studies must be such that the results of the mixing zone studies can be extrapolated to all CSOs in the system. The mixing zone studies must identify the smallest sized mixing zones such that State Water Quality standards are met at the edge of the mixing zones under all tidal conditions at summer mean low flow conditions. The permittee shall also develop a methodology for determining appropriate mixing zones for all CSOs in its system, based on the CSO characterization and mixing zone studies.
- b. By no later than December 1, 1994, submit a draft facilities plan; and
  - c. By no later than December 1, 1995, submit a final approvable facilities plan.
  - d. The permittee is required to meet the minimum technology based limitation specified by EPA, to eliminate all discharges during dry weather, and to meet Oregon's water quality standards. In the event that the above described facilities plan demonstrates that further control measures are required, the Department will negotiate a schedule for attaining compliance in a timely manner. This schedule will be incorporated into an administrative order.]
- 6[7]. By December 31, 1991, the permittee shall submit a list of all known locations in the sanitary/combined sewage collection system where raw sewage could be discharged directly to state waters, including, but not limited to CSOs and pump station bypasses. The list shall include the location and type of discharge point, the name of the receiving stream, and the circumstances under which a discharge may occur.

[8. Columbia Slough Waste Load Allocations

- a. Within 12 months of the signing of this permit, the City of Portland shall submit a draft plan and time schedule to the Department describing how and when the City will modify its sewerage facilities to comply with the Waste Load Allocations identified in the Department's Total Maximum Daily Loads (TMDLs) for the Columbia Slough.
- b. Within 18 months of the signing of this permit, the City of Portland shall submit a final plan and time schedule to the Department describing how and when the City will modify its sewerage facilities to comply with the Waste Load Allocations identified in the Department's TMDLs for the Columbia Slough.
- c. The City of Portland shall enter into a Memorandum of Agreement with the Department of Environmental Quality which describes the Department's expectations and requirements of the TMDLs for pollutants of concern in the Columbia Slough. Any appropriate schedules may be modified by the Memorandum of Agreement. The time schedule for compliance conditions 7(a) and 7(b) in Schedule C of this permit may be modified by the Memorandum of Agreement. The Memorandum of Agreement will be incorporated into this permit by addendum.]

7[9]. By December 31, 1991, the permittee shall develop a public notification process to inform citizens of when and where untreated sewage discharges occur. The process shall be submitted in written form to the Department for approval. The process shall be implemented upon written approval from the Department. The process shall include:

- a. A mechanism to alert people using the Willamette River and Columbia Slough of the occurrence of untreated sewage discharges; and
- b. A system to determine the extent and duration of conditions that are potentially unhealthful for users of the Willamette River and Columbia Slough due to untreated sewage discharges.

8[10]. The permittee is expected to meet the compliance dates which have been established in this schedule. Either prior to or no later than 14 days following any lapsed compliance date, the permittee shall submit to the Department a notice of compliance or noncompliance with the established schedule. The Director may revise a schedule of compliance if he determines good and valid cause resulting from events over which the permittee has little or no control.

**SCHEDULE D**

**Special Conditions**

1. All sludge shall be managed in accordance with a sludge management plan approved by the Department of Environmental Quality. No substantial changes shall be made in sludge management activities which significantly differ from operations specified under the approved plan without the prior written approval of the Department.
2. The permittee shall implement the bioassay toxicity testing program specified in Schedules B and C of this permit.
  - a. If any acute bioassay test indicates that the effluent sample is toxic, another toxicity test using the same species and the same methodology shall be conducted within two weeks. If the second test also indicates toxicity, the permittee shall follow the procedure described in section (c) of this permit condition.
  - b. If a chronic bioassay test indicates that the effluent sample is toxic at the dilutions determined to occur at the edge of the mixing zone, or if there is no dilution data for the edge of the mixing zone and any chronic bioassay test indicates that the effluent is toxic, another toxicity test using the same species and the same methodology shall be conducted within two weeks. If the second test also indicates toxicity, the permittee shall follow the procedure described in section (c) of this permit condition.
  - c. If, after following the procedure as described in sections (a) or (b) of this permit condition, two consecutive bioassay test results indicate acute and/or chronic toxicity, the permittee shall evaluate the source of the toxicity and submit a plan and time schedule for achieving compliance with the water quality standards for toxicity. Upon approval by the Department, the permittee will implement the plan until compliance has been achieved. Evaluations shall be completed and plans submitted within 6 months.
3. The permittee shall comply with Oregon Administrative Rules (OAR) Chapter 340, Division 49, "Regulations Pertaining to Certification of Wastewater System Operator Personnel", including the following:
  - a. Have its wastewater collection system supervised by one or more operators certified at a grade level equal to or higher than the system classification shown on page 1 of this permit. The designated supervisor(s) shall be available to the system owner and any other operator of the facility.

- b. Have its wastewater treatment system supervised by one or more operators certified at a grade level equal to or higher than the system classification shown on page 1 of this permit. The supervisor(s) shall be available to the system owner and any other operator of the facility.
- c. When the designated supervisor(s) are not available, have an operator available who is certified no less than one grade level below the system classification. This condition applies to system owners who designate supervisors to be fully responsible for system operation in lieu of the designated supervisor (if any are designated by the permittee) and any temporary supervisor so designated by the permittee. A system shall not be without an individual certified at the classification of the system for more than 30 days.
- d. Notify the Department in writing within 30 days of replacement or redesignation of operators identified as responsible for supervising the operation of the wastewater systems.
- e. File with the Department at the time of permit renewal the name of the properly certified operator(s) designated the responsibility of supervising the operation of the wastewater treatment and collection systems.

4. After waste load allocations are made for the Columbia Slough, the Department will re-open this permit to include effluent limits for the CSO's that discharge to the Columbia Slough, as appropriate.

**SCHEDULE E**

The permittee shall implement the following pretreatment activities:

1. The permittee shall conduct and enforce the industrial waste pretreatment program as approved by the Department and the General Pretreatment Regulations (40 CFR 403). The following shall be implemented or submitted by the permittee:
  - a. Enforce federal pretreatment regulations as promulgated by EPA or local limitations, whichever are more stringent. Locally derived limitations shall be defined as pretreatment standards under Section 307(d) of the Clean Water Act.
  - b. Issue wastewater discharge permits to all significant industrial users. These shall, at a minimum, contain limitations, sampling protocols, compliance schedule (if appropriate), and reporting requirements. Except as provided in 40 CFR, part 403.3(t)(2), A significant industrial user means:
    - (1) All industrial users subject to Categorical Pretreatment Standards under 40 CFR, part 403.6 and 40 CFR, Chapter I, Subchapter N; and
    - (2) Any other industrial user that
      - (i) Discharges an average of 25,000 gallons per day or more of process wastewater to the permittee's sewerage facility (excluding sanitary, noncontact cooling and boiler blowdown wastewater);
      - (ii) Contributes a process wastestream which makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the permittee's sewage treatment plant; or
      - (iii) Is designated as such by the Control Authority as defined in 40 CFR, part 403.12(a) on the basis that the industrial user has a reasonable potential for adversely affecting the permittee's operation or for violating any pretreatment standard or requirement (in accordance with 40 CFR, part 403.8(f)(6).
  - c. As appropriate, update the industrial user survey. At a minimum, this shall include maintaining and updating records identifying the nature, character, and volume of pollutants contributed by significant industrial users. Records shall be maintained for a 3-year period.

- d. Carry out inspections and monitoring activities on significant industrial users to determine compliance with applicable pretreatment standards. Monitoring of significant industrial users shall be commensurate with the discharge but shall not be less than semi-annually.
  - e. Provide to the Department by March 1 of each year, a report (2 copies) that describes the permittee's pretreatment program activities over the previous calendar year. The content of this report shall be as established by the Department.
2. The permittee shall develop and maintain local limits to prevent interference, pass through of pollutants, and sludge contamination.
  3. Require accidental spill and prevention programs from industrial users having a history of, or possessing the potential for, accidental discharges or spills that could upset the treatment process or cause a violation of this NPDES permit.
  4. The permittee shall obtain timely and appropriate remedies utilizing its approved enforcement response procedure to assure [for] compliance by any industrial user who violates federal, state, or local pretreatment standards and requirements.
  5. The permittee shall perform at a minimum, on a semi-annual basis (wet and dry season), chemical analyses of its influent, effluent, and final sludge for specific toxic pollutants. The list of toxics, exact sampling frequency and protocol shall be as described by the Department in Schedule B of this NPDES permit.
  6. The permittee shall request and obtain approval from the Department before implementing any significant changes to the approved local pretreatment program.



## NPDES GENERAL CONDITIONS

### SECTION A. STANDARD CONDITIONS

#### 1. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of Oregon Revised Statutes (ORS) 468.720 and is grounds for enforcement action; for permit termination; suspension, or modification; or for denial of a permit renewal application.

#### 2. Penalties for Violations of Permit Conditions

Oregon Law (ORS 468.990) classifies a willful or negligent violation of the terms of a permit or failure to get a permit as a misdemeanor and a person convicted thereof shall be punishable by a fine of no more than \$25,000 or by imprisonment for not more than one year, or by both. Each day of violation constitutes a separate offense.

In addition to the criminal penalties specified above, Oregon Law (ORS 468.140) also allows the Director to impose civil penalties up to \$10,000 per day for violation of the terms or conditions of a permit.

#### 3. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment or human health resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

#### 4. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and have the permit renewed. The application should be submitted at least 180 days before the expiration date of this permit.

The Director may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date.

#### 5. Permit Actions

This permit may be modified, suspended, or terminated for cause including, but not limited to, the following:

- a. Violation of any terms or conditions of this permit, rule, or statute;
- b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or

- c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

The filing of a request by the permittee for a permit modification or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

6. Toxic Pollutants

The permittee shall comply with any applicable effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

7. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any violation of federal, state or local laws or regulations.

## SECTION B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

1. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

2. Duty to Halt or Reduce Activity

Upon reduction, loss, or failure of the treatment facility, the permittee shall, to the extent necessary to maintain compliance with its permit, control production or all discharges or both until the facility is restored or an alternative method of treatment is provided. This requirement applies, for example, when the primary source of power of the treatment facility fails or is reduced or lost. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

### 3. Bypass of Treatment Facilities

#### a. Definitions

- (1) "Bypass" means diversion of waste streams from any portion of the conveyance system or treatment facility.
- (2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

#### b. Prohibition of bypass.

- (1) Bypass is prohibited and the Director may take enforcement action against a permittee for bypass, unless:
  - (a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
  - (b) There were no feasible alternatives to the bypass, such as the use of auxiliary pumping, conveyance, or treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if the permittee could have installed adequate backup equipment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and
  - (c) The permittee submitted notices and requests as required under paragraph c of this section.
- (2) The Director may approve an anticipated bypass, after considering its adverse effects, when the Director determines that it will meet the three conditions listed above in paragraph b(1) of this section.

#### c. Notice and request for bypass.

- (1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.
- (2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Section D, Paragraph D-5 (24-hour notice).

- d. Bypass not exceeding limitations.

The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs b and c of this section.

4. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in such a manner as to prevent any pollutant from such materials from entering public waters, causing nuisance conditions, or creating a public health hazard.

### SECTION C. MONITORING AND RECORDS

1. Representative Sampling

Sampling and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this permit and shall be taken, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water, or substance. Monitoring points shall not be changed without notification to and the approval of the Director.

2. Flow Measurements

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to insure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated and maintained to insure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than  $\pm 10\%$  from true discharge rates throughout the range of expected discharge volumes.

3. Monitoring Procedures

Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

4. Penalties of Tampering

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

5. Reporting of Monitoring Results

Monitoring results shall be summarized each month on a Discharge Monitoring Report form approved by the Department. The reports shall be submitted monthly and are to be postmarked by the 14th day of the following month unless specifically approved otherwise in Schedule B of this permit.

6. Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR. Such increased frequency shall also be indicated.

7. Averaging of Measurements

Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean, except for coliform and fecal coliform bacteria which shall be averaged based on a geometric or log mean.

8. Retention of Records

The permittee shall retain records of all monitoring information, including all calibration and maintenance records of all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, or report of application. This period may be extended by request of the Director at any time.

9. Records Contents

Records of monitoring information shall include:

- a. The date, exact place, time and methods of sampling or measurements;
- b. The individual(s) who performed the sampling or measurements;
- c. The date(s) analyses were performed;
- d. The individual(s) who performed the analyses;
- e. The analytical techniques or methods used; and
- f. The results of such analyses.

## 10. Inspection and Entry

The permittee shall allow the Director, or an authorized representative upon the presentation of credentials to:

- a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit, and
- d. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by state law, any substances or parameters at any location.

## SECTION D. REPORTING REQUIREMENTS

### 1. Planned Changes

The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility which will result in a change in the character of pollutants to be discharged or which will result in a new or increased discharge of pollutants.

### 2. Anticipated Noncompliance

The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

### 3. Transfers

This permit may be transferred to a new permittee provided the transferee acquires a property interest in the permitted activity and agrees in writing to fully comply with all the terms and conditions of the permit and the rules of the Commission. No permit shall be transferred to a third party without prior written approval from the Director. The permittee shall notify the Department when a transfer of property interest takes place.

### 4. Compliance Schedule

Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date. Any reports of noncompliance shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirements.

5. Twenty-Four Hour Reporting

The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally (by telephone) within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain:

- a. A description of the noncompliance and its cause;
- b. The period of noncompliance, including exact dates and times;
- c. The estimated time noncompliance is expected to continue if it has not been corrected; and
- d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The Department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

The following shall be included as information which must be reported within 24 hours:

- a. Any unanticipated bypass which exceeds any effluent limitation in the permit.
- b. Any upset which exceeds any effluent limitation in the permit.

6. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under Section D, Paragraphs D-4 and D-5, at the time monitoring reports are submitted. The reports shall contain the information listed in Paragraph D-5.

7. Duty to Provide Information

The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine compliance with this permit. The permittee shall also furnish to the Department, upon request, copies of records required to be kept by this permit.

Other Information: When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the Department, it shall promptly submit such facts or information.

8. Signatory Requirements

All applications, reports or information submitted to the Department shall be signed and certified in accordance with 40 CFR 122.22.

9. Falsification of Reports

State law provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished by a fine of not more than \$1,000 per violation, or by imprisonment for not more than six months per violation, or by both.

SECTION E. DEFINITIONS AND ACRONYMS

1. BOD means five-day biochemical oxygen demand.
2. TSS means total suspended solids (non-filterable residue).
3. mg/l means milligrams per liter.
4. kg means kilograms.
5. m<sup>3</sup>/d means cubic meters per day.
4. MGD means million gallons per day.
5. Composite sample means a combination of samples collected, generally at equal intervals over a 24-hour period, and apportioned according to the volume of the flow at the time of the sampling.
6. FC means fecal coliform bacteria.



STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: April 23, 1991

TO: Environmental Quality Commission

FROM: Fred Hansen

SUBJECT: Work Session Agenda Item 5 - Proposed Changes in Stipulation and Final Order for City of Portland

A draft Stipulation and Final Order for the City of Portland was made available for public review and comment on March 25, 1991. The draft Order included a detailed time schedule to correct water quality violations resulting from Portland's Combined Sewer Overflows (CSOs). A public hearing held on March 25 to take testimony on the proposed NPDES permit also included some testimony on the subject of Portland's Combined Sewer Overflows (CSOs). In addition, written comments on the draft order were received up to April 19, 1991.

Based on the many comments received, some changes are proposed in the Order. The revised order is attached, with the proposed revisions underlined and proposed deletions in brackets. The following describes briefly the changes made.

1. Page 2, lines 9 through 16 - references to the Sullivan pump station are deleted. This pump station in fact only discharges when there is a mechanical failure, and does not regularly discharge.
2. Page 2, lines 20 through 26 and page 3, lines 1 through 4 - this narrative describes the factual background regarding the status of the CSOs in the City's existing permit. This paragraph provides acknowledgement that the existing permit does not include specific effluent limitations for CSOs, but did cover the entire sewer system including the CSOs.
3. Page 3, lines 9 through 11 - this reference highlights Oregon water quality standards relating to visible solids and floatable material. These parameters are mentioned specifically because they are also listed as requiring controls under the technology based limitations for CSO's, which are listed in the permit.

The CSO's are required to meet two sets of standards - Oregon's water quality standards (including objectionable solids and floatable material), by 1977; and technology based limitations for CSO's, by whatever date is

negotiated in the permit. This change means that the Order covers not only any water quality standard violations that may occur, but also this one technology based limitation. The other technology based limitations for CSO's are covered by the permit, and not the Order.

4. Page 4, lines 3 through 9 - this states why the Department has decided not to issue a civil penalty for past violations of the CSOs.
5. Page 5, lines 1 through 18 - this requires that the Department review and approve a scope of study for the facilities plan, and includes the minimum areas of study to be included in the facilities plan.
6. Page 5, lines 20 through 21 - the section of the permit referred to has been deleted, but the requirement to submit the information describing the discharges from the CSO's is still in effect. The changes clarify what is required.
7. Page 6, lines 4 and 7 - the dates for completing and submitting the draft and final facilities plans have been moved up by 18 months. Further discussions between the City and Department indicate that the new dates are realistic.
8. Page 6, lines 9 and 10 - this change requires that the final facilities plan be approved by the Commission. The facilities plan will include the necessary environmental, engineering, and financial information to allow any adjustments (up or down) that may be necessary. By requiring that the Commission approve the facilities plan, the public is assured of a chance to review the progress of the entire project, and potentially offer comment regarding necessary changes in the scope of the project. This process also allows the City the chance to present any information and proposals they may have regarding changes in the schedule or scope of the project.
9. Page 10, lines 24 through 26, and page 11, lines 1 through 3 - this change allows the Department to unilaterally alter the Order, and allows the City due process appeals to the Commission.

1 BEFORE THE ENVIRONMENTAL QUALITY COMMISSION

2 OF THE STATE OF OREGON

3	DEPARTMENT OF ENVIRONMENTAL QUALITY, )	STIPULATION AND FINAL ORDER
4	OF THE STATE OF OREGON, )	No. WQ-NWR-91-75
5	Department, )	MULTNOMAH COUNTY
6	v. )	
7	CITY OF PORTLAND, )	
8	Respondent. )	

9 WHEREAS:

10 1. On \_\_\_\_\_, 1991, the Department of Environmental  
11 Quality (Department or DEQ) issued National Pollution Discharge  
12 Elimination System (NPDES) Waste Discharge Permit Number 3881-J  
13 (Permit) to the City of Portland (Respondent), pursuant to Oregon  
14 Revised Statutes (ORS) 468.740 and the Federal water Pollution  
15 Control Act Amendments of 1972, P.L. 92-500. The Permit authorizes  
16 the Respondent to construct, install, modify or operate waste water  
17 treatment control and disposal facilities (facilities) and discharge  
18 adequately treated waste waters into the Columbia River and  
19 Willamette River, waters of the state, in conformance with the  
20 requirements, limitations and conditions set forth in the Permit.  
21 The Permit expires on \_\_\_\_\_, 1996.

22 2. Respondent's sewage collection system is comprised in part  
23 of combined sewers designed to collect both sanitary sewage and  
24 storm runoff water. The combined sewer system is designed and  
25 intended to collect and transport all sanitary sewage to  
26 Respondent's sewage treatment plant during periods of dry weather;

1 however, during some periods of wet weather, the combined sanitary  
2 sewage and storm runoff entering the system exceeds the system's  
3 capacity to collect and transport sewage to the sewage treatment  
4 plant. At such times, the excess combined sanitary sewage and storm  
5 runoff are discharged through Combined Sewer Overflows directly to  
6 the Willamette River and Columbia Slough, waters of the state,  
7 without treatment. Respondent's system includes 54 Combined Sewer  
8 Overflows. In addition, Respondent owns and operates sewage pump  
9 stations, one [two] of which, the Ankeny Pump Station [and the  
10 Sullivan Pump Station], may not be capable of pumping all incoming  
11 combined sanitary sewage and storm runoff during periods of wet  
12 weather. At such times, combined sanitary sewage and storm runoff  
13 are discharged from the Ankeny [and Sullivan] Pump Station[s]  
14 directly to the Willamette River without treatment. The discharges  
15 of combined sanitary sewage and storm runoff from the Combined Sewer  
16 Overflows and the Ankeny [and Sullivan] Pump Station[s] (Discharges)  
17 may cause violations of Oregon's water quality standards for Fecal  
18 Coliform bacteria and possibly other parameters in the Columbia  
19 Slough and the Willamette River.

20 3. Respondent's prior NPDES permit, issued on September 18,  
21 1984, did not expressly identify the combined sewer overflow  
22 discharge points that are part of the sewer system. Prior to the  
23 development of the Department's final draft 'Oregon Strategy for  
24 Regulating Combined Sewer Overflows (GSOs)' on February 28, 1991, as  
25 a matter of policy the Department did not always list GSO discharge  
26 points in an NPDES permit but, in many instances, issued permits for

1 an entire sewer system. EPA's Region 10 office approved the  
2 issuance of such permits. Respondent's 1984 NPDES permit is a  
3 permit for the sewer system, which includes CSO outfalls, but did  
4 not contain specific effluent limitations for CSOs.

5 4[3]. Since the adoption of water quality standards for  
6 the Willamette Basin (included in Oregon Administrative Rules 340-  
7 41-445) by the Environmental Quality Commission in 1976, Respondent  
8 has discharged combined sanitary sewage and storm runoff and may  
9 have caused violations of water quality standards. These water  
10 quality standards include limitations on visible solids and  
11 floatable material.

12 5[4]. DEQ and the Respondent recognize that until new or  
13 modified facilities are constructed and put into full operation,  
14 Respondent may cause violations of the water quality standards at  
15 times.

16 6[5]. Respondent presently is conducting or preparing to  
17 conduct studies and facilities planning in order to determine the  
18 quantity and quality of combined sanitary sewage and storm runoff  
19 discharged from its sewage system, and to determine appropriate  
20 methods and time schedules to eliminate violations of water quality  
21 standards.

22 7[6]. The Department and Respondent recognize that the  
23 Environmental Quality Commission (Commission) has the power to  
24 impose a civil penalty and to issue an abatement order for  
25 violations of water quality standards. Therefore, pursuant to ORS  
26 183.415(5), the Department and Respondent wish to settle those

1 possible past violations referred to in Paragraph 4[3] and to limit  
2 and resolve the future violations referred to in Paragraph 5[4] in  
3 advance by this Stipulation and Final Order. This action by the  
4 Commission and Department constitutes diligent prosecution of all  
5 violations that may have occurred prior to the effective date of  
6 this Order. In light of the recent development of EPA and  
7 Departmental strategy and policy governing permitting and evaluation  
8 of CSO impacts on water quality, imposition of a civil penalty at  
9 this time is not deemed appropriate by the Department.

10 8[7]. This Stipulation and Final Order is not intended to  
11 limit, in any way, the Department's right to proceed against  
12 Respondent in any forum for any past or future violations not  
13 expressly settled herein.

14  
15 NOW THEREFORE, it is stipulated and agreed that:

16 9[8]. The Commission hereby issues a final order:

17 a. Requiring the Respondent to eliminate all  
18 Discharges that violate water quality standards from November 1  
19 through April 30 except during storms greater than or equal to a  
20 storm with a five year return frequency and to eliminate all  
21 Discharges that violate water quality standards from May 1 through  
22 October 31 except during storms greater than or equal to a storm  
23 with a ten [twenty-five] year return frequency, in accordance with  
24 the following schedule:

25 (1) By no later than August 1, 1991, the Respondent shall  
26 submit to the Department an approvable scope of study for the

1 facilities plan. The facilities plan shall, at a minimum, include a  
2 characterization of the Discharges including volume, times of  
3 discharge, and bacterial and chemical content; alternatives for  
4 eliminating water quality violations; the environmental and other  
5 impacts of the alternatives evaluated; the estimated cost of the  
6 alternatives; an evaluation of the impact of the CSO control  
7 alternatives on the Columbia Blvd. wastewater treatment plant; if  
8 the CSO alternatives will cause permit violations at the treatment  
9 plant, an evaluation of alternatives to expand or upgrade the  
10 treatment plant so as to maintain compliance with existing discharge  
11 standards; recommended control alternatives including any required  
12 plant upgrades that will result in compliance with water quality  
13 standards for the CSO discharges and compliance with the existing  
14 treatment plant discharge standards; a detailed implementation  
15 schedule for completing the recommended actions; and a mechanism for  
16 financing the recommended improvements.

17 (2[1]) By no later than December 31, 1992, the  
18 Respondent shall submit the [results of] portion of the facilities  
19 plan that [a study to] characterizes Combined Sewer Overflows[, as  
20 described in the Respondent's Permit];

21 (3[2]) By no later than December 31, 1992, the  
22 Respondent shall submit a plan including a schedule for Phase 1 and  
23 Phase 2 interim control methods to be used to minimize water quality  
24 violations until such time as final compliance is attained;

25 (4[3]) By no later than October 1, 1994, the  
26

1 Respondent shall implement Phase 1 interim control methods as  
2 agreed to by the Respondent and the Department;

3 (5[4]) By no later than July 1, 1993 [December  
4 1, 1994], the Respondent shall submit a draft facilities plan to the  
5 Department, as described in Respondent's Permit;

6 (6[5]) By no later than July 1, 1994 [December  
7 1, 1995], the Respondent shall submit to the Department a final  
8 approvable facilities plan and obtain approval of the facilities  
9 plan from the Commission;

10 (7[6]) By no later than October 1, 1996, the  
11 Respondent shall remove all large solids and floatables from  
12 discharges to the Columbia Slough;

13 (8[7]) By no later than December 1, 1997, the  
14 Respondent shall submit final engineering plans and specifications  
15 for construction work required to comply with Section  
16 9[8](a)(11[10]);

17 (9[8]) By no later than December 1, 1997, the  
18 Respondent shall implement Phase 2 interim control methods as agreed  
19 to by the Respondent and the Department;

20 (10[9]) By no later than May 1, 1998, the  
21 Respondent shall begin construction required to comply with Section  
22 9(a)(11)[8(a)(10)];

23 (11[10]) By no later than December 1, 2001, the  
24 Respondent shall eliminate discharges that violate water quality  
25 standards, subject to the storm return frequencies specified in  
26 Paragraph 9[8]a of this Order, at 20 of the CSO discharge points,



1 including all discharges to Columbia Slough, consistent with the  
2 facilities plan approved by the Commission [Department];

3 (12[11]) By no later than December 1, 2001 the  
4 Respondent shall submit final engineering plans and specifications  
5 for construction work required to comply with Section  
6 9(a)(14)[8(a)(13)];

7 (13[12]) By no later than May 1, 2003 the  
8 Respondent shall begin construction required to comply with Section  
9 9(a)(14)[8(a)(13)];

10 (14[13]) By no later than December 1, 2006 the  
11 respondent shall eliminate discharges that violate water quality  
12 standards, subject to the storm return frequencies specified in  
13 Paragraph 9[8]a of this Order, at 16 of the remaining CSO discharge  
14 points, consistent with the facilities plan approved by the  
15 Commission [Department];

16 (15[14]) By no later than December 1, 2006 the  
17 Respondent shall submit engineering plans and specifications for  
18 construction work required to comply with Section 9(a)(17)  
19 [8(a)(16)];

20 (16[15]) By no later than May 1, 2008, the  
21 Respondent shall begin construction required to comply with Section  
22 9(a)(17) [8(a)(16)];

23 (17[16]) By no later than December 1, 2011, the  
24 Respondent shall eliminate discharges that violate water quality  
25 standards, subject to the storm return frequencies specified in  
26 Paragraph 9[8]a of this Order, at all remaining CSO discharge

1 points, consistent with the facilities plan approved by the  
2 Commission [Department];

3 (17) By no later than September 1 of each year that  
4 this Order is in effect, the Respondent shall submit to the  
5 Department an annual progress report on efforts to minimize and  
6 eliminate discharges that violate water quality standards. These  
7 annual reports shall include at a minimum work completed in the  
8 previous fiscal year and work scheduled to be completed in the  
9 current fiscal year.

10 b. Requiring Respondent to comply with all the terms,  
11 schedules and conditions of the Permit, except those modified by  
12 Paragraph 2[8](a) above, or of any other NPDES waste discharge  
13 permit issued to Respondent while this Order is in effect.

14 c. Requiring Respondent to demonstrate that each  
15 discharge is in compliance with water quality standards, by a means  
16 approved by the Department, within twelve months of the scheduled  
17 date when compliance is required in this Order. Nothing in this  
18 paragraph prevents the Department from enforcing this Order during  
19 the twelve month demonstration period.

20 d. Requiring Respondent to identify each discharge  
21 that is converted to a storm sewer discharge only.

22 e. Requiring Respondent, in the event that Respondent  
23 chooses to retain a Discharge with any connected sanitary wastes, to  
24 apply for a modification of Respondent's permit requesting a waste  
25 load increase and appropriately sized mixing zone. Nothing in this  
26

1 paragraph shall affect the Department's or the Commission's  
2 discretion over granting such a request.

3 f. Requiring Respondent, upon receipt of a written  
4 notice from the Department for any violations of the Stipulation and  
5 Final Order, to pay the following civil penalties:

6 (i) \$1,000 for each day of each violation of each  
7 provision of the compliance schedule set forth in  
8 Paragraph 9[8](a).

9 (ii) \$2,500 per outfall per day for each CSO  
10 outfall for which Respondent fails to demonstrate  
11 compliance with water quality standards as  
12 specified in 9[8](c). Discharges that are listed  
13 and regulated in Respondent's Permit as may be  
14 allowed in 9[8](e) shall not be subject to  
15 stipulated civil penalties under the terms of this  
16 Order.

17 10[9]. If any event occurs that is beyond Respondent's  
18 reasonable control and that causes or may cause a delay or deviation  
19 in performance of the requirements of this Stipulation and Final  
20 Order, Respondent shall immediately notify the Department verbally  
21 of the cause of delay or deviation and its anticipated duration, the  
22 measures that have been or will be taken to prevent or minimize the  
23 delay or deviation, and the timetable by which Respondent proposes  
24 to carry out such measures. Respondent shall confirm in writing  
25 this information within five (5) working days of the onset of the  
26 event. It is Respondent's responsibility in the written

1 notification to demonstrate to the Department's satisfaction that  
2 the delay or deviation has been or will be caused by circumstances  
3 beyond the control and despite due diligence of Respondent. If  
4 Respondent so demonstrates, the Department shall extend times of  
5 performance of related activities under the Stipulation and Final  
6 Order as appropriate. Circumstances or events beyond Respondent's  
7 control include, but are not limited to, acts of nature, unforeseen  
8 strikes, work stoppages, fires, explosion, riot, sabotage, or war.  
9 Increased cost of performance or consultant's failure to provide  
10 timely reports shall not be considered circumstances beyond  
11 Respondent's control.

12 11[10]. Regarding the violations set forth in Paragraph  
13 4[3] and 5[4] above, which are expressly settled herein without  
14 penalty, Respondent and the Department hereby waive any and all of  
15 their rights to any and all notices, hearing, judicial review, and  
16 to service of a copy of the final order herein. The Department  
17 reserves the right to enforce this order through appropriate  
18 administrative and judicial proceedings.

19 12[11]. Regarding the schedule set forth in Paragraph  
20 9[8](a) above, Respondent acknowledges that Respondent is  
21 responsible for complying with that schedule regardless of the  
22 availability of any federal or state grant monies.

23 13[12]. The terms of this Stipulation and Final Order may be  
24 amended by the mutual agreement of the Department and Respondent, or  
25 upon a determination by the Department that modification is  
26 necessary to achieve the purposes of the water pollution control

1 laws. Such modification shall be subject to the right of the  
2 respondent to seek a contested case before the Environmental Quality  
3 Commission on the modification.

4 13. Respondent acknowledges that it has actual notice of the  
5 contents and requirements of the Stipulation and Final Order and  
6 that failure to fulfill any of the requirements hereof would  
7 constitute a violation of this Stipulation and Final Order and  
8 subject Respondent to payment of civil penalties pursuant to  
9 Paragraph 8(e) above.

10 14. This Stipulation and Final Order shall terminate 60 days  
11 after Respondent demonstrates full compliance with the requirements  
12 of the schedule set forth in Paragraph 8(a) above.

13 15. If it becomes necessary to allocate wasteloads as a result  
14 of either the Willamette River or the Columbia River being  
15 designated as Water Quality Limited, the parties agree that  
16 Respondent's reductions in discharges pursuant to this agreement  
17 will be considered as contributing to Respondent's share of the  
18 obligation to achieve water quality standards.

RESPONDENT

Date \_\_\_\_\_

(Name) \_\_\_\_\_

(Title) \_\_\_\_\_

DEPARTMENT OF ENVIRONMENTAL QUALITY

Date \_\_\_\_\_

Fred Hansen, Director

FINAL ORDER

IT IS SO ORDERED:

ENVIRONMENTAL QUALITY

COMMISSION

Date \_\_\_\_\_

Fred Hansen, Director

Department of Environmental Quality

Pursuant to OAR 340-11-136(1)

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: April 23, 1991

TO: Environmental Quality Commission

FROM: Fred Hansen

SUBJECT: Work Session Agenda Item 5 - Proposed Changes in Stipulation and Final Order for City of Portland

A draft Stipulation and Final Order for the City of Portland was made available for public review and comment on March 25, 1991. The draft Order included a detailed time schedule to correct water quality violations resulting from Portland's Combined Sewer Overflows (CSOs). A public hearing held on March 25 to take testimony on the proposed NPDES permit also included some testimony on the subject of Portland's Combined Sewer Overflows (CSOs). In addition, written comments on the draft order were received up to April 19, 1991.

Based on the many comments received, some changes are proposed in the Order. The revised order is attached, with the proposed revisions underlined and proposed deletions in brackets. The following describes briefly the changes made.

1. Page 2, lines 9 through 16 - references to the Sullivan pump station are deleted. This pump station in fact only discharges when there is a mechanical failure, and does not regularly discharge.
2. Page 2, lines 20 through 26 and page 3, lines 1 through 4 - this narrative describes the factual background regarding the status of the CSOs in the City's existing permit. This paragraph provides acknowledgement that the existing permit does not include specific effluent limitations for CSOs, but did cover the entire sewer system including the CSOs.
3. Page 3, lines 9 through 11 - this reference highlights Oregon water quality standards relating to visible solids and floatable material. These parameters are mentioned specifically because they are also listed as requiring controls under the technology based limitations for CSO's, which are listed in the permit.

The CSO's are required to meet two sets of standards - Oregon's water quality standards (including objectionable solids and floatable material), by 1977; and technology based limitations for CSO's, by whatever date is

negotiated in the permit. This change means that the Order covers not only any water quality standard violations that may occur, but also this one technology based limitation. The other technology based limitations for CSO's are covered by the permit, and not the Order.

4. Page 4, lines 3 through 9 - this states why the Department has decided not to issue a civil penalty for past violations of the CSOs.
5. Page 5, lines 1 through 18 - this requires that the Department review and approve a scope of study for the facilities plan, and includes the minimum areas of study to be included in the facilities plan.
6. Page 5, lines 20 through 21 - the section of the permit referred to has been deleted, but the requirement to submit the information describing the discharges from the CSO's is still in effect. The changes clarify what is required.
7. Page 6, lines 4 and 7 - the dates for completing and submitting the draft and final facilities plans have been moved up by 18 months. Further discussions between the City and Department indicate that the new dates are realistic.
8. Page 6, lines 9 and 10 - this change requires that the final facilities plan be approved by the Commission. The facilities plan will include the necessary environmental, engineering, and financial information to allow any adjustments (up or down) that may be necessary. By requiring that the Commission approve the facilities plan, the public is assured of a chance to review the progress of the entire project, and potentially offer comment regarding necessary changes in the scope of the project. This process also allows the City the chance to present any information and proposals they may have regarding changes in the schedule or scope of the project.
9. Page 10, lines 24 through 26, and page 11, lines 1 through 3 - this change allows the Department to unilaterally alter the Order, and allows the City due process appeals to the Commission.



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BEFORE THE ENVIRONMENTAL QUALITY COMMISSION  
OF THE STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY, OF THE STATE OF OREGON,	)	STIPULATION AND FINAL ORDER
	)	No. WQ-NWR-91-75
	)	MULTNOMAH COUNTY
Department,	)	
	)	
v.	)	
	)	
CITY OF PORTLAND,	)	
	)	
Respondent.	)	

WHEREAS:

1. On \_\_\_\_\_, 1991, the Department of Environmental Quality (Department or DEQ) issued National Pollution Discharge Elimination System (NPDES) Waste Discharge Permit Number 3881-J (Permit) to the City of Portland (Respondent), pursuant to Oregon Revised Statutes (ORS) 468.740 and the Federal water Pollution Control Act Amendments of 1972, P.L. 92-500. The Permit authorizes the Respondent to construct, install, modify or operate waste water treatment control and disposal facilities (facilities) and discharge adequately treated waste waters into the Columbia River and Willamette River, waters of the state, in conformance with the requirements, limitations and conditions set forth in the Permit.

The Permit expires on \_\_\_\_\_, 1996.

2. Respondent's sewage collection system is comprised in part of combined sewers designed to collect both sanitary sewage and storm runoff water. The combined sewer system is designed and intended to collect and transport all sanitary sewage to Respondent's sewage treatment plant during periods of dry weather;

1 however, during some periods of wet weather, the combined sanitary  
2 sewage and storm runoff entering the system exceeds the system's  
3 capacity to collect and transport sewage to the sewage treatment  
4 plant. At such times, the excess combined sanitary sewage and storm  
5 runoff are discharged through Combined Sewer Overflows directly to  
6 the Willamette River and Columbia Slough, waters of the state,  
7 without treatment. Respondent's system includes 54 Combined Sewer  
8 Overflows. In addition, Respondent owns and operates sewage pump  
9 stations, one [two] of which, the Ankeny Pump Station [and the  
10 Sullivan Pump Station], may not be capable of pumping all incoming  
11 combined sanitary sewage and storm runoff during periods of wet  
12 weather. At such times, combined sanitary sewage and storm runoff  
13 are discharged from the Ankeny [and Sullivan] Pump Station[s]  
14 directly to the Willamette River without treatment. The discharges  
15 of combined sanitary sewage and storm runoff from the Combined Sewer  
16 Overflows and the Ankeny [and Sullivan] Pump Station[s] (Discharges)  
17 may cause violations of Oregon's water quality standards for Fecal  
18 Coliform bacteria and possibly other parameters in the Columbia  
19 Slough and the Willamette River.

20 3. Respondent's prior NPDES permit, issued on September 18,  
21 1984, did not expressly identify the combined sewer overflow  
22 discharge points that are part of the sewer system. Prior to the  
23 development of the Department's final draft 'Oregon Strategy for  
24 Regulating Combined Sewer Overflows (CSOs)' on February 28, 1991, as  
25 a matter of policy the Department did not always list CSO discharge  
26 points in an NPDES permit but, in many instances, issued permits for

1 an entire sewer system. EPA's Region 10 office approved the  
2 issuance of such permits. Respondent's 1984 NPDES permit is a  
3 permit for the sewer system, which includes CSO outfalls, but did  
4 not contain specific effluent limitations for CSOs.

5 4[3]. Since the adoption of water quality standards for  
6 the Willamette Basin (included in Oregon Administrative Rules 340-  
7 41-445) by the Environmental Quality Commission in 1976, Respondent  
8 has discharged combined sanitary sewage and storm runoff and may  
9 have caused violations of water quality standards. These water  
10 quality standards include limitations on visible solids and  
11 floatable material.

12 5[4]. DEQ and the Respondent recognize that until new or  
13 modified facilities are constructed and put into full operation,  
14 Respondent may cause violations of the water quality standards at  
15 times.

16 6[5]. Respondent presently is conducting or preparing to  
17 conduct studies and facilities planning in order to determine the  
18 quantity and quality of combined sanitary sewage and storm runoff  
19 discharged from its sewage system, and to determine appropriate  
20 methods and time schedules to eliminate violations of water quality  
21 standards.

22 7[6]. The Department and Respondent recognize that the  
23 Environmental Quality Commission (Commission) has the power to  
24 impose a civil penalty and to issue an abatement order for  
25 violations of water quality standards. Therefore, pursuant to ORS  
26 183.415(5), the Department and Respondent wish to settle those

1 possible past violations referred to in Paragraph 4[3] and to limit  
2 and resolve the future violations referred to in Paragraph 5[4] in  
3 advance by this Stipulation and Final Order. This action by the  
4 Commission and Department constitutes diligent prosecution of all  
5 violations that may have occurred prior to the effective date of  
6 this Order. In light of the recent development of EPA and  
7 Departmental strategy and policy governing permitting and evaluation  
8 of CSO impacts on water quality, imposition of a civil penalty at  
9 this time is not deemed appropriate by the Department.

10 8[7]. This Stipulation and Final Order is not intended to  
11 limit, in any way, the Department's right to proceed against  
12 Respondent in any forum for any past or future violations not  
13 expressly settled herein.

14  
15 NOW THEREFORE, it is stipulated and agreed that:

16 9[8]. The Commission hereby issues a final order:

17 a. Requiring the Respondent to eliminate all  
18 Discharges that violate water quality standards from November 1  
19 through April 30 except during storms greater than or equal to a  
20 storm with a five year return frequency and to eliminate all  
21 Discharges that violate water quality standards from May 1 through  
22 October 31 except during storms greater than or equal to a storm  
23 with a ten [twenty-five] year return frequency, in accordance with  
24 the following schedule:

25 (1) By no later than August 1, 1991, the Respondent shall  
26 submit to the Department an approvable scope of study for the

1 facilities plan. The facilities plan shall, at a minimum, include a  
2 characterization of the Discharges including volume, times of  
3 discharge, and bacterial and chemical content; alternatives for  
4 eliminating water quality violations; the environmental and other  
5 impacts of the alternatives evaluated; the estimated cost of the  
6 alternatives; an evaluation of the impact of the CSO control  
7 alternatives on the Columbia Blvd. wastewater treatment plant; if  
8 the CSO alternatives will cause permit violations at the treatment  
9 plant, an evaluation of alternatives to expand or upgrade the  
10 treatment plant so as to maintain compliance with existing discharge  
11 standards; recommended control alternatives including any required  
12 plant upgrades that will result in compliance with water quality  
13 standards for the CSO discharges and compliance with the existing  
14 treatment plant discharge standards; a detailed implementation  
15 schedule for completing the recommended actions; and a mechanism for  
16 financing the recommended improvements.

17 (2[1]) By no later than December 31, 1992, the  
18 Respondent shall submit the [results of] portion of the facilities  
19 plan that [a study to] characterizes Combined Sewer Overflows[, as  
20 described in the Respondent's Permit];

21 (3[2]) By no later than December 31, 1992, the  
22 Respondent shall submit a plan including a schedule for Phase 1 and  
23 Phase 2 interim control methods to be used to minimize water quality  
24 violations until such time as final compliance is attained;

25 (4[3]) By no later than October 1, 1994, the  
26

1 Respondent shall implement Phase 1 interim control methods as  
2 agreed to by the Respondent and the Department;

3 (5[4]) By no later than July 1, 1993 [December  
4 1, 1994], the Respondent shall submit a draft facilities plan to the  
5 Department, as described in Respondent's Permit;

6 (6[5]) By no later than July 1, 1994 [December  
7 1, 1995], the Respondent shall submit to the Department a final  
8 approvable facilities plan and obtain approval of the facilities  
9 plan from the Commission;

10 (7[6]) By no later than October 1, 1996, the  
11 Respondent shall remove all large solids and floatables from  
12 discharges to the Columbia Slough;

13 (8[7]) By no later than December 1, 1997, the  
14 Respondent shall submit final engineering plans and specifications  
15 for construction work required to comply with Section  
16 9[8](a)(11[10]);

17 (9[8]) By no later than December 1, 1997, the  
18 Respondent shall implement Phase 2 interim control methods as agreed  
19 to by the Respondent and the Department;

20 (10[9]) By no later than May 1, 1998, the  
21 Respondent shall begin construction required to comply with Section  
22 9(a)(11)[8(a)(10)];

23 (11[10]) By no later than December 1, 2001, the  
24 Respondent shall eliminate discharges that violate water quality  
25 standards, subject to the storm return frequencies specified in  
26 Paragraph 9[8]a of this Order, at 20 of the CSO discharge points,

1 including all discharges to Columbia Slough, consistent with the  
2 facilities plan approved by the Commission [Department];

3 (12[11]) By no later than December 1, 2001 the  
4 Respondent shall submit final engineering plans and specifications  
5 for construction work required to comply with Section  
6 9(a)(14)[8(a)(13)];

7 (13[12]) By no later than May 1, 2003 the  
8 Respondent shall begin construction required to comply with Section  
9 9(a)(14)[8(a)(13)];

10 (14[13]) By no later than December 1, 2006 the  
11 respondent shall eliminate discharges that violate water quality  
12 standards, subject to the storm return frequencies specified in  
13 Paragraph 9[8]a of this Order, at 16 of the remaining CSO discharge  
14 points, consistent with the facilities plan approved by the  
15 Commission [Department];

16 (15[14]) By no later than December 1, 2006 the  
17 Respondent shall submit engineering plans and specifications for  
18 construction work required to comply with Section 9(a)(17)  
19 [8(a)(16)];

20 (16[15]) By no later than May 1, 2008, the  
21 Respondent shall begin construction required to comply with Section  
22 9(a)(17) [8(a)(16)];

23 (17[16]) By no later than December 1, 2011, the  
24 Respondent shall eliminate discharges that violate water quality  
25 standards, subject to the storm return frequencies specified in  
26 Paragraph 9[8]a of this Order, at all remaining CSO discharge

1 points, consistent with the facilities plan approved by the  
2 Commission [Department];

3 (17) By no later than September 1 of each year that  
4 this Order is in effect, the Respondent shall submit to the  
5 Department an annual progress report on efforts to minimize and  
6 eliminate discharges that violate water quality standards. These  
7 annual reports shall include at a minimum work completed in the  
8 previous fiscal year and work scheduled to be completed in the  
9 current fiscal year.

10 b. Requiring Respondent to comply with all the terms,  
11 schedules and conditions of the Permit, except those modified by  
12 Paragraph 2[8](a) above, or of any other NPDES waste discharge  
13 permit issued to Respondent while this Order is in effect.

14 c. Requiring Respondent to demonstrate that each  
15 discharge is in compliance with water quality standards, by a means  
16 approved by the Department, within twelve months of the scheduled  
17 date when compliance is required in this Order. Nothing in this  
18 paragraph prevents the Department from enforcing this Order during  
19 the twelve month demonstration period.

20 d. Requiring Respondent to identify each discharge  
21 that is converted to a storm sewer discharge only.

22 e. Requiring Respondent, in the event that Respondent  
23 chooses to retain a Discharge with any connected sanitary wastes, to  
24 apply for a modification of Respondent's permit requesting a waste  
25 load increase and appropriately sized mixing zone. Nothing in this  
26



1 paragraph shall affect the Department's or the Commission's  
2 discretion over granting such a request.

3 f. Requiring Respondent, upon receipt of a written  
4 notice from the Department for any violations of the Stipulation and  
5 Final Order, to pay the following civil penalties:

6 (i) \$1,000 for each day of each violation of each  
7 provision of the compliance schedule set forth in  
8 Paragraph 2[8](a).

9 (ii) \$2,500 per outfall per day for each CSO  
10 outfall for which Respondent fails to demonstrate  
11 compliance with water quality standards as  
12 specified in 2[8](c). Discharges that are listed  
13 and regulated in Respondent's Permit as may be  
14 allowed in 2[8](e) shall not be subject to  
15 stipulated civil penalties under the terms of this  
16 Order.

17 10[9]. If any event occurs that is beyond Respondent's  
18 reasonable control and that causes or may cause a delay or deviation  
19 in performance of the requirements of this Stipulation and Final  
20 Order, Respondent shall immediately notify the Department verbally  
21 of the cause of delay or deviation and its anticipated duration, the  
22 measures that have been or will be taken to prevent or minimize the  
23 delay or deviation, and the timetable by which Respondent proposes  
24 to carry out such measures. Respondent shall confirm in writing  
25 this information within five (5) working days of the onset of the  
26 event. It is Respondent's responsibility in the written

1 notification to demonstrate to the Department's satisfaction that  
2 the delay or deviation has been or will be caused by circumstances  
3 beyond the control and despite due diligence of Respondent. If  
4 Respondent so demonstrates, the Department shall extend times of  
5 performance of related activities under the Stipulation and Final  
6 Order as appropriate. Circumstances or events beyond Respondent's  
7 control include, but are not limited to, acts of nature, unforeseen  
8 strikes, work stoppages, fires, explosion, riot, sabotage, or war.  
9 Increased cost of performance or consultant's failure to provide  
10 timely reports shall not be considered circumstances beyond  
11 Respondent's control.

12 11[10]. Regarding the violations set forth in Paragraph  
13 4[3] and 5[4] above, which are expressly settled herein without  
14 penalty, Respondent and the Department hereby waive any and all of  
15 their rights to any and all notices, hearing, judicial review, and  
16 to service of a copy of the final order herein. The Department  
17 reserves the right to enforce this order through appropriate  
18 administrative and judicial proceedings.

19 12[11]. Regarding the schedule set forth in Paragraph  
20 9[8](a) above, Respondent acknowledges that Respondent is  
21 responsible for complying with that schedule regardless of the  
22 availability of any federal or state grant monies.

23 13[12]. The terms of this Stipulation and Final Order may be  
24 amended by the mutual agreement of the Department and Respondent, or  
25 upon a determination by the Department that modification is  
26 necessary to achieve the purposes of the water pollution control

1. laws. Such modification shall be subject to the right of the  
2 respondent to seek a contested case before the Environmental Quality  
3 Commission on the modification.

4. 13. Respondent acknowledges that it has actual notice of the  
5 contents and requirements of the Stipulation and Final Order and  
6 that failure to fulfill any of the requirements hereof would  
7 constitute a violation of this Stipulation and Final Order and  
8 subject Respondent to payment of civil penalties pursuant to  
9 Paragraph 8(e) above.

10 14. This Stipulation and Final Order shall terminate 60 days  
11 after Respondent demonstrates full compliance with the requirements  
12 of the schedule set forth in Paragraph 8(a) above..

13 15. If it becomes necessary to allocate wasteloads as a result  
14 of either the Willamette River or the Columbia River being  
15 designated as Water Quality Limited, the parties agree that  
16 Respondent's reductions in discharges pursuant to this agreement  
17 will be considered as contributing to Respondent's share of the  
18 obligation to achieve water quality standards.

RESPONDENT

Date

(Name)

(Title)

DEPARTMENT OF ENVIRONMENTAL QUALITY

Date

Fred Hansen, Director

FINAL ORDER

IT IS SO ORDERED:

ENVIRONMENTAL QUALITY

COMMISSION

Date

Fred Hansen, Director  
Department of Environmental Quality  
Pursuant to OAR 340-11-136(1)

**REQUEST FOR EQC ACTION**

Meeting Date: April 26, 1991  
Agenda Item: B  
Division: MSD  
Section: Administration

**SUBJECT:**

Approval of Tax Credit Applications. Approval of Request for Extension to File a Pollution Control Tax Credit Application.

**ACTION REQUESTED:**

- Work Session Discussion
  - General Program Background
  - Potential Strategy, Policy, or Rules
  - Agenda Item  for Current Meeting
  - Other: (specify)
  
- Authorize Rulemaking Hearing
- Adopt Rules
  - Proposed Rules Attachment
  - Rulemaking Statements Attachment
  - Fiscal and Economic Impact Statement Attachment
  - Public Notice Attachment
  
- Issue a Contested Case Order
- Approve a Stipulated Order
- Enter an Order
  - Proposed Order Attachment
  
- Approve Department Recommendation
  - Variance Request Attachment
  - Exception to Rule Attachment
  - Informational Report Attachment
  - Other: (specify) A Attachment

Tax credit application review report; approve request for extension of time to file a pollution control tax credit application.



811 SW Sixth Avenue  
Portland, OR 97204-1390  
(503) 229-5696



Meeting Date: April 26, 1991  
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Tax Credit Application Review Reports:

TC-2215 Emark, Inc.	Solvent Recovery System.
TC-2395 Gregory Forest Products	Log chest with closed recirculation block heating system.
TC-2644 Weyerhaeuser Co.	Stationery containment hood and two piece pivoting front cover on raw material truck dump hopper.
T-2709 Roseburg Paving Co.	Astec Industries Asphalt Coater.
TC-2710 Reerslev Farms, Inc.	Straw storage shed.
TC-2862 Morse Bros., Inc.	Reverse pulse baghouse.
TC-2907 Weyerhaeuser Co.	Three baghouse filters.
TC-2922 Atochem North America	Secondary water containment system for process chemicals.
TC-2935 Temple Distributing, Inc.	Installation of spill containment basins, tank monitor with overflow alarm, automatic shutoff valves and line leak detectors.
TC-2943 Weyerhaeuser Co.	Regenerative air type street sweeper.
TC-2970 C & D Lumber Company, Inc.	Installation of one fiberglass tank and piping, spill containment basin, overflow valve and monitoring well.
TC-2980 Smart Mart, Inc.	Installation of three STI-P3 double wall tanks and double wall fiberglass piping, spill containment basins, automatic shutoff valves, tank monitor, sumps and oil/water separator.

Meeting Date: April 26, 1991  
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TC-3205  
Merritt Truax, Inc.

Installation of leak detection and overflow prevention on ten underground storage tanks in the form of automatic tank gauges and overflow alarm.

TC-3209  
Metrofueling

Installation of leak detection and overflow prevention in the form of automatic tank gauges and overflow alarm.

TC-3242  
Venell Farms, Inc.

Straw storage shed.

TC-3243  
Venell Farms, Inc.

Hay rake; baler and bale carrier.

TC-3244  
Venell Farms, Inc.

Mobile Field Sanitizer.

TC-3247  
Nixon Farms, Inc.

30' Swath Propane Flamer.

TC-3314  
Michael and Lisa Bodtker

Straw storage shed.

TC-3318  
Truax Corporation, Inc.

Installation of cathodic protection, fiberglass piping, spill containment basins, automatic shutoff valves and line leak detectors, monitoring wells, sumps and Stage II vapor recovery piping.

TC-3324  
Truax Corporation, Inc.

Installation of cathodic protection on three steel tanks and piping and spill containment basins.

TC-3325  
Truax Corporation, Inc.

Installation of cathodic protection on three tanks and piping, spill containment basins, automatic shutoff valves and line leak detectors and a tank monitor.

TC-3326  
Truax Corporation, Inc.

Installation of cathodic protection on four steel tanks and piping, spill containment basins & automatic shutoff valves.

Meeting Date: April 26, 1991  
Agenda Item: B  
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TC-3327 Truax Corporation, Inc.	Installation of cathodic protection on four steel tanks, fiberglass piping, spill containment basins, automatic shutoff valves and line leak detectors.
TC-3329 Truax Corporation, Inc.	Installation of epoxy lining in and cathodic protection around three tanks and spill containment basins on five tanks.
TC-3330 Truax Corporation, Inc.	Installation of fiberglass piping, spill containment basins, automatic shutoff valves, line leak detectors and cathodic protection on three tanks.
TC-3332 Truax Corporation, Inc.	Installation of fiberglass piping, spill containment basins, automatic shutoff valves and line leak detectors.
TC-3333 Truax Corporation, Inc.	Installation of cathodic protection on five steel tanks and piping.
TC-3334 Truax Corporation, Inc.	Installation of cathodic protection on one steel tank and piping system, spill containment basin and an automatic shutoff valve.
TC-3335 Truax Corporation, Inc.	Installation of cathodic protection on three tanks, spill containment basins & automatic shutoff valves.
TC-3336 Truax Corporation, Inc.	Installation of cathodic protection on three tank and piping systems.
TC-3337 Truax Corporation, Inc.	Installation of cathodic protection on four steel tanks.
TC-3338 Truax Corporation, Inc.	Installation of cathodic protection on three tanks and piping, spill containment basins and automatic shutoff valves.
TC-3340 Truax Corporation, Inc.	Installation of three automatic shutoff valves.
TC-3341 Truax Corporation, Inc.	Installation of cathodic protection on four steel tanks and piping.



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Agenda Item: B  
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TC-3342 Truax Corporation, Inc.	Installation of spill containment basins on three underground storage tanks.
TC-3343 Truax Corporation, Inc.	Installation of fiberglass piping for three tank systems and tank lining in one tank.
TC-3344 Truax Corporation, Inc.	Installation of cathodic protection on three steel tanks.
TC-3345 Truax Corporation, Inc.	Installation of cathodic protection on three steel tanks and piping.
TC-3346 Truax Corporation, Inc.	Installation of cathodic protection on four steel tanks.
TC-3347 Truax Corporation, Inc.	Installation of spill containment basins, automatic shutoff valves and line leak detectors.
TC-3348 Truax Corporation, Inc.	Installation of cathodic protection, fiberglass piping, spill containment basins, automatic shutoff valves and line leak detectors, monitoring wells, and Stage I vapor recovery.
TC-3349 Truax Corporation, Inc.	Installation of epoxy lining and cathodic protection on three steel tanks, fiberglass piping, spill containment basins, automatic shutoff valves and line leak detectors.
TC-3355 Strome-Fisher Farms, Inc.	Straw storage shed.
TC-3357 Rogue Valley Oil Co., Inc.	Installation of four STI-P3 tanks and fiberglass piping, spill containment basins, tank monitor, turbine leak detectors, overflow alarm and monitoring wells.
TC-3358 Rogue Valley Oil Co., Inc.	Installation of four fiberglass tanks and piping, spill containment basins, tank monitor, turbine leak detectors, overflow alarm and monitoring wells.
TC-3360 Willamette Industries, Inc.	Western Pneumatic Bagfilter.

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TC-3362 Garold H. Leppin	Straw storage shed; balewagon.
TC-3363 Ridenour Oil Co., Inc.	Installation of four STI-P3 double wall tanks and fiberglass piping, spill containment basins, tank monitor, line leak detectors, monitoring wells, automatic shutoff valves, piping for Stage II vapor recovery and an oil/water separator.
TC-3364 Ridenour Oil Co., Inc.	Installation of four STI-P3 double wall tanks and fiberglass piping, spill containment basins, tank monitor, line leak detectors, monitoring wells, automatic shutoff valves, piping for Stage II vapor recovery and an overflow alarm.
TC-3366 Polk County Farmers Co-op	Installation of five double wall fiberglass tanks and piping, spill containment basins, tank monitor, monitoring wells, automatic shutoff valves and line leak detectors.
TC-3367 Pratum Co-op Warehouse, Inc.	Installation of three fiberglass tanks and double wall fiberglass piping, spill containment basins, tank monitor, monitoring wells, oil/water separator, automatic shutoff valves and a bottom loader.
TC-3368 Roadrunner Gas & Grocery	Installation of an automatic tank monitoring system.
TC-3369 Smith Bros. Farms	Used John Deere 8640 Tractor.
TC-3370 Rolland S. Piatt	Installation of double wall fiberglass piping, tank monitor, spill containment basins, turbine leak detectors, overflow alarm, automatic shutoff valves and Stage I and II vapor recovery equipment and piping.
TC-3372 Ernest Glaser Farms	Modified 60B Hesston Stakhand.
TC-3373 Brian Glaser	John Deere 4955 Tractor.

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TC-3374  
Grange Coop. Supply Assoc. Installation of a tank monitor system and an overflow alarm.

TC-3375  
Grange Coop. Supply Assoc. Installation of a tank monitor system.

TC-3376  
James D. Ellison Installation of epoxy lining in four steel tanks and spill containment basins.

TC-3377  
Barry Desbiens, Inc. Installation of three fiberglass tanks and fiberglass piping, spill containment basins, tank monitor, line leak detectors, float vent valves, overflow alarm, monitoring wells and Stage II vapor recovery piping.

TC-3378  
L. P. Busch, Inc. Installation of three STI-P3 tanks and fiberglass piping, spill containment basins, tank monitor, line leak detectors, float vent valves, monitoring wells, sumps and Stage I & II vapor recovery.

TC-3379  
L. P. Busch, Inc. Installation of three STI-P3 tanks and fiberglass piping, spill containment basins, tank monitor, line leak detectors, float vent valves, sumps and Stage I & II vapor recovery.

TC-3380  
L. P. Busch, Inc. Installation of three STI-P3 tanks and fiberglass piping, spill containment basins, tank monitor, line leak detectors, float vent valves, monitoring wells, sumps and Stage I & II vapor recovery.

TC-3381  
Byrnes Oil Co., Inc. New installation of two fiberglass tanks, fiberglass piping, spill containment basins, tank monitor, float vent valves and monitoring wells.

TC-3382  
Ronald H. Gustafson Installation of three STI-P3 tanks and fiberglass piping, cathodic protection, spill containment basins, tank monitor, turbine leak detectors, float vent valves, monitoring wells and Stage I vapor recovery equipment.

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TC-3386 Johnson Oil Company, Inc.	Installation of epoxy lining in three steel tanks and spill containment basins.
TC-3387 Johnson Oil Co., Inc.	Installation of two STI-P3 2-compartment tanks and fiberglass piping, spill containment basins, line leak detectors, monitoring wells and automatic shutoff valves.
TC-3389 Baker Valley Chevron	Installation of a tank monitor and spill containment basins.
TC-3391 Delphia Oil, Inc.	Installation of one additional fiberglass tank and fiberglass piping, spill containment basins, monitoring wells, sump and automatic shutoff valves.
TC-3392 Delphia Oil, Inc.	Installation of spill containment basins and automatic shutoff valves.
TC-3393 Delphia Oil, Inc.	Installation of fiberglass piping, spill containment basins, monitoring wells and automatic shutoff valves.
TC-3394 Sixth Street Shell	Installation of fiberglass piping, cathodic protection, spill containment basins, line leak detectors, float vent valves, monitoring wells and Stage I and II vapor recovery piping and equipment.
TC-3395 Third Street Shell	Installation of three double wall fiberglass tanks and piping, spill containment basins, turbine leak detectors, float vent valves, monitoring wells and Stage I and II vapor recovery piping and equipment.
TC-3396 Plum Fierce Shell	Installation of three double wall fiberglass tanks and piping, spill containment basins, turbine leak detectors, float vent valves, monitoring wells and Stage I and II vapor recovery piping and equipment.

Meeting Date: April 26, 1991  
Agenda Item: B  
Page 9

DESCRIPTION OF REQUESTED ACTION:

Issue Tax Credit Certificates for Pollution Control Facilities; approve an application filing extension of one year to Fujitsu Microelectronics, Inc.

AUTHORITY/NEED FOR ACTION:

<input checked="" type="checkbox"/> Required by Statute: <u>ORS 468.150-468.190</u>	Attachment	___
Enactment Date: _____		
<input type="checkbox"/> Statutory Authority: _____	Attachment	___
<input type="checkbox"/> Pursuant to Rule: <u>OAR 340 Division 16</u>	Attachment	___
<input type="checkbox"/> Pursuant to Federal Law/Rule: _____	Attachment	___
<input type="checkbox"/> Other:	Attachment	___
<input type="checkbox"/> Time Constraints:		

DEVELOPMENTAL BACKGROUND:

<input type="checkbox"/> Advisory Committee Report/Recommendation	Attachment	___
<input type="checkbox"/> Hearing Officer's Report/Recommendations	Attachment	___
<input type="checkbox"/> Response to Testimony/Comments	Attachment	___
<input type="checkbox"/> Prior EQC Agenda Items: (list)		
	Attachment	___
<input type="checkbox"/> Other Related Reports/Rules/Statutes:		
	Attachment	___
<input type="checkbox"/> Supplemental Background Information	Attachment	___

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

PROGRAM CONSIDERATIONS:

None.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

None.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

The Department recommends the Environmental Quality Commission approve certification for tax credit applications identified above, and approve a one-year filing extension to Fujitsu Microelectronics, Inc. (See Attachment A)

Meeting Date: April 26, 1991  
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CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

Yes.

Note - Pollution Tax Credit Totals:

Proposed April 26, 1991 Totals

	<u>Certified Costs*</u>	<u># of Certificates</u>
Air Quality	\$ 3,720,214	18
Hazardous/Solid Waste	0	0
Noise	0	0
Underground Storage Tanks	2,000,043	55
Water Quality	<u>1,459,088</u>	<u>2</u>
TOTAL	\$ 7,179,345	75

1991 Calendar Year Totals through March 11, 1991

	<u>Certified Costs*</u>	<u># of Certificates</u>
Air Quality	\$ 8,164,593	31
Hazardous/Solid Waste	36,617	1
Noise	0	0
Underground Storage Tanks	1,354,457	35
Water Quality	<u>628,338</u>	<u>2</u>
TOTAL	\$10,184,005	69

\* This amount represents the amount of the facility costs that are allocable to pollution control. To calculate the actual dollars that can be applied as credit, multiply the amount by 50 percent.

INTENDED FOLLOWUP ACTIONS:

Notify applicants of Environmental Quality Commission actions.

Approved:

Section: Roberta Young

Division: Pete A. Kelly

Director: Bill Ham

Report Prepared By: Roberta Young

Phone: 229-6408

Date Prepared: April 9, 1991

RY:y  
MY101406  
April 9, 1991

State of Oregon  
Department of Environmental Quality

Request For Extension To File A Final Application

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1. Applicant

Fujitsu Microelectronics, Inc.  
3545 No. First St.  
San Jose, CA 96134-1804

2. Request

The applicant requests a one-year extension to file pollution control tax credit certificate applications for air pollution, noise, hazardous waste, and water pollution control facilities.

The applicant's reasons for the extension request relate to a lack of engineering and accounting personnel necessary to oversee project and application requirements. (See attached letter). The facilities specifically included in the request are listed in the Exhibit G attachment.

3. Authority

OR 340-16-020 (e) provides the Commission with authority to grant an extension of time to file an application if circumstances beyond the control of the applicant would make a timely filing unreasonable.

4. Director's Recommendation

The Director recommends the Commission grant:

Fujitsu Microelectronics, Inc. a one-year filing extension which would terminate on April 1, 1992, to allow the company additional time to submit applications for the above specified air and water pollution control facilities.

Roberta Young  
MY101405  
(503) 229-6408

February 26, 1991

Ms. Roberta Young  
State of Oregon  
Department of Environmental Quality  
811 SW Sixth Avenue  
Portland, Oregon 97204-1390

Re: Application for Certification of a Pollution Control  
Facility for Tax Relief Purposes Pursuant to ORS 468.155  
et seq.  
Fujitsu Microelectronics, Inc.  
ACDP No. 26-3240  
NC No. 2287

Dear Ms. Young:

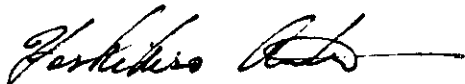
Please accept this letter as our formal request for an extension of time for filing the Application for Certification of a Noise Pollution Control Facility, Air Pollution Control Facility, Hazardous Waste Pollution Control Facility, and Water Pollution Facility for Tax Relief Purposes. Please extend our due date for one year or April 1, 1992 pursuant to ORS 468.165.-(6).

Due to the immense amount of engineering time necessary to oversee the completion of the facilities and its start-up our engineers were not available at the outset in the records summarization process. We have also experienced turnover in a number of key engineering and accounting positions. Therefore, we were not able to allocate personnel to the project without incurring substantial added cost. Furthermore, as we become involved in the task of summarizing the cost data, we found that the task would require substantial additional work in order to be "auditable" by either your department or an outside auditor.

As the result of these unforeseeable events, we respectfully request an extension of time for one year to complete the Application for Final Certification of a Pollution Control Facility for Tax Relief purposes pursuant to ORS 468.155, et. seq. for the above mentioned pollution control facilities.

If you should have any questions regarding this request, please call me.

Yours very truly,



Mr. Yoshihiro Ando  
Vice President Administration and CFO



## NOISE POLLUTION CONTROLS

### EXHIBIT G

The Noise Control Facilities consist of the following items:

- a. A freestanding attached sound wall was build on the south side of the Utility Building. This wall is 30' high and 215' long wrapping the east and south sides of the cooling towers. Construction consists of concrete foundations, structural steel framework, Industrial Acoustics (IAC) 4" thick sound absorbing panels on the interior of the wall and HH Robertson 2" thick Formawall 1000H on the exterior of the wall.
- b. A freestanding attached sound wall on the north side of the Utility Building blocks the acid waste neutralization and HF treatment containment dikes. This wall is 30' tall and 80' long. Construction is similar to item #1, without the HH Robertson panels.
- c. A free-standing sound wall located on the roof of the processing building surrounds 3 sides of the roof mounted exhaust system platforms. The wall is 20' tall and 315' long. The wall has a structural steel framework and 2" thick HH Robertson Formawall 1000H on the external of the wall.
- d. Two sound absorbing mufflers on each exhaust stack of the three gas-fired boilers were installed in series. These units were manufactured by HAPCO, VCS Series, model 3096VCS12. These mufflers are both the reactive and absorbent types.
- e. Sound absorbing mufflers (respectively 20 in all) were installed on the exhaust ducting from roof mounted fans on the following process ventilations systems:
  1. Fab A solvent, acid and ammonia exhaust systems (6 total).
  2. Solvent, acid, ammonia, phosphorus, implanters heat exhaust systems (10 total).
  3. Support area solvent and acid exhaust systems (4 total).

There are two mufflers per system since there are dual exhaust fans on each system. The mufflers were IAC conic-flow type CL and were custom units manufactured by IAC, and supplied by their local Portland area representative G. Van Alst Company.

NOISE POLLUTION CONTROLS CONT.

EXHIBIT G

- f. A concrete masonry building around the two standby power generators. This building is 30' high, 24' wide and 53' deep and was installed for the purpose of containing noise emissions from the on-site standby power generators. The east and south exterior walls of this building area were covered with 4" IAC sound adsorption panels over 3-1/2" sound blankets. The CMU block was grouted solid and covered with 2" IS/300 Manville vinyl coated sound batts with the seam taped. Acoustical doors were custom manufactured by IAC to allow generator removal and to provide sound reduction at the opening.
- g. Sound adsorbing mufflers were installed on the exhaust ducting of the standby power diesel generators. These critical area mufflers are HAPCO, VCS series, number 2888VCS10SI, and were installed in series, 2 per generator.
- h. Two additional Marley cooling towers were installed to compensate for the lower cooling capacity created by reducing the existing towers to 67% of their former speed. The added 5 towers were also reduced to 67% of manufactures rated speed.

HAZARDOUS WASTE POLLUTION CONTROL FACILITY

EXHIBIT G

The Hazardous Waste Handling Facility consists of the following items:

- a. One dedicated room for the filling and storage of hazardous waste drums and other materials. It is rated Class I, Division I to safely handle flammable solvents. This mandates explosion-proof wiring and electrical fixtures, as well as a blow-out wall in case of explosion. It has a recessed, impermeable floor under grating to contain any spills. This room is used only for the management of hazardous waste.
  
- b. One teflon pneumatic transfer pump (Wilden Model M1) to transfer waste solvents from carboys to drums.

## AIR POLLUTION CONTROL FACILITY

### EXHIBIT G

The control equipment for the control of gaseous discharges consists of the following:

- a. Seven skid-mounted aqueous scrubbers furnished by Hurrington Plastics. They each consist of:
  1. A main FRB body
  2. Porous plastic packing to fill main body
  3. Two or three circulating pumps (depends upon unit)
  4. pH monitor
  5. Recirculation flow meter
  6. Automatic water fill and drain valves.
  7. Effluent gas demisters
  8. Some units have automatic chemical feed systems of Sulfuric acid or Sodium Hydroxide to maintain proper pH in the recirculating pumps.

The units are identified by the following designations:

1. Wafer Support area Scrubber (Model EGV-44-4TBS)
  2. Fab A Acid Scrubber (Model ECV-77-4)
  3. Fab A Ammonia Scrubber (Model ECV11-6TBS)
  4. Fab B Acid Scrubber (Model ECV98-5LPS)
  5. Fab B Ammonia Scrubber (Model ECV56-5LPS)
  6. Fab B Phosphoric Acid Scrubber (Model ECV56-5LPS)
  7. Fab B Implant area Scrubber (Model #ECV56-5LPS)
  8. Support area acid scrubber (Model 20V44-4TBS)
- b. Activated Carbon off-gas adsorbers to adsorb Chloride-containing particulates and gases from various manufacturing processes. There are 7 units in service with a backup of 4 units in standby or being serviced and renewed. These units are "CLEANS-B" units from Showa Denko, K.K., Japan.
  - c. One off-gas adsorbing system for adsorbing and rendering harmless toxic gases from the Ion-Implantation process. The unit is a "TOXOCLEAN" TC-5CS III A/II. It is made by Toyo Sango Co., Ltd. of Japan. The gas adsorbing material is replaced at regular intervals to maintain its effectiveness in adsorbing the gases. The main unit is a permanent installation.

WASTEWATER POLLUTION CONTROL FACILITY

EXHIBIT G

A. Two wastewater pH neutralization systems, each consisting of:

- a. Effluent collection tank and drain system, two forwarding pumps (Fybroc Model #1500 3x4x13) and associated controls. These are located in the process building basement.

The following items are located on the North side of the utility building:

- b. Waste equalization tank (15,000 gal.) with level sensor, side-mounted agitator (Philadelphia Model #900-900-1601 IC), two transfer pumps (Worthington Model #D1012), and associated controls.
- c. Two neutralization tanks in series with the following equipment:
1. Top mounted agitators (Philadelphia Model #900-900-1603).
  2. Ph monitors (Great Lakes Model #690PIF5AON).
  3. Caustic addition system (Badger Research control valve Model #1002GCHCSSVCSDLN36), Foxboro I/P converter (Model #10971186).
  4. Sulfuric acid addition system (Neptune metering pumps Model #S32-A-N4-TE3).
  5. Buffer addition system (LMI pump Model #D131-2OHV), hold tank and agitator.
  6. Associated controls.
- d. Final effluent hold tank (15,000 gal.) with level sensor, side mounted agitator (Philadelphia Model #900-900-01607IC) two transfer pumps (Worthington Model #D1012), PH monitor (Great Lakes Model #690PIF5AON) and associated controls.

In addition, these two systems share a common Caustic Storage tank (10,000 gal.) with two caustic circulation pumps (Worthington Model #1011), a common Sulfuric acid Storage tank (3,000 gal.) and their associated level sensors and controls.

B. One Fluoride Treatment system consisting of:

Two effluent collection tank and drain systems four forwarding pumps, two (Dorn Oliver Model #72205-2), two (Vanton Model #CG-KY80CE) and associated controls, located in the process building basement.

WASTEWATER POLLUTION CONTROL FACILITY CONT.

EXHIBIT G

The following equipment is located on the North side of the Utility building:

- a. Waste equalization tank (12,000 gal.) with level sensor, Fluoride monitor (Orion Model #1709), pH monitor (Great Lakes Model #690PI5AON) and three initial transfer pumps (Pompeli Caster Model #HMC27002PP).
- b. Fluoride Reaction Chamber unit, consisting of a lined steel processing vessel, 3 agitators (Lightning Model #50-230), 2 pH monitors (Great Lakes Model #690PI5AON) and a flocculating chamber with rotary flocculating drum.
- c. Fluoride precipitation chamber unit, consisting of lined steel processing vessel, sludge scraper mechanism of scraper flights on chains with gear drive-motor (SM Cyclo Model #HM3165), pH monitor (Great Lakes Model #690PI5AON) and two forwarding pumps (Gould Model #3196).
- d. Effluent filters, consisting of 3 multi-media bed filters with associated automatic valves.
- e. Final hold tank (8,000 gal.) with level sensor, fluoride monitor (Orion Model #1709), pH monitor (Great Lakes Model #690PI5AON) and one backwash pump (Gould Model #3196).
- f. Effluent flow monitoring unit, consisting of a FRP Parshall Flume (PlastiFab) and sonic flow transducer (Fischer -Porter Model #3111ABB).
- g. Associated alum feed system consisting of a hold tank (FRP 400 gal.) and two feed pumps (Precision Pumps Model #H4861-92I).
- h. Associated lime feed system consisting of the following:
  1. Steel hold tank (4,000 gal.)
  2. Lime tank agitator (Lightning Model #5EARIS10).
  3. Lime pumps two (Galiger Modes #IBVTAO1000).
  4. Lime tank level transducer.
  5. Automatic water fill valve.
  6. Lime dump hopper with dust collection system (Donaldson Model #64).
- i. Associated controls and recorders.

WASTEWATER POLLUTION CONTROL FACILITY CONT.

EXHIBIT G

All the wastewater is discharged through a metering flume required by the Industrial Wastewater Discharge Permit. This flume consists of the following:

- a. Concrete vault and cover.
- b. Parshall flume (custom unit by PlastiFab) and associated flow transducer (Fischer-Porter Model #3111ABE).
- c. pH monitor (Great Lakes Model #69OPIF5AON).

State of Oregon  
Department of Environmental Quality

**TAX RELIEF APPLICATION REVIEW REPORT**

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1. Applicant

EMARK Inc.  
250 North Hansard Avenue  
Lebanon, OR 97355

The applicant leases and operates a plant to manufacture porous plastic sheet in Lebanon, Oregon.

Application was made for tax credit for an air pollution control facility.

2. Description of Facility

The porous plastic sheet is manufactured with oil in the pores which must then be removed with trichloroethylene (TCE) solvent. The claimed facility collects TCE vapors from process equipment and converts the vapors back to liquid TCE for re-use in the process. The vapors (containing a maximum of 300 ppmv of TCE in air) are collected from process equipment exhausts and from a storage tank vent. The claimed facility starts where vapors are ducted outside of the process plant to an activated carbon bed. The vapors are absorbed onto the carbon and then removed during a steam regeneration cycle. The bulk of the TCE is then removed from the condensed steam by gravity separation, decanted. A 0.1% soluble TCE residue remains in the water and is removed by a distillation column to below the measurable amount. A quarter of the water through the distillation column is process water rather than water condensed from regenerating the carbon bed; however, historically this process water was air stripped to remove TCE before being discharged. The distillation column is, therefore, always used for air pollution control and is part of the claimed facility. The claimed facility ends where the pure TCE from the decanter and the distillation column enters the "reclaimed solvent tank" which also receives process reclaimed TCE and new TCE.

The claimed facility also includes all the ancillary equipment needed to operate and monitor the carbon bed and distillation column. The cost of the boiler could be allocated by fraction: claimed facility steam load/total steam load. However, the boiler was not supplied as part of the carbon bed system and the applicant did not include it in the application though the claimed facility consumes most of the boiler steam load. The cost of the duct work to duct the process vapors from the process equipment to outside the plant are included in the application and are included as part of the claimed facility since the cost to just vent the process equipment through the roof would be less than 1% of the claimed cost of \$2,102,951 or \$21,029.



Claimed Facility Cost: \$2,102,951.00  
(Accountant's Certification was provided).

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that:

- a. The request for preliminary certification was filed more than 30 days before construction commenced on March 1987.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Construction of the facility was substantially completed on May 1987. The Environmental Quality Commission, at its meeting on July 21, 1989, approved the applicant's request for a one year extension of the time to file an application for final certification until September 15, 1990. This time was needed by the applicant to determine operating cost data. The application was submitted on September 15, 1990. The application for final certification was found to be complete on March 7, 1991.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department to control air pollution. The requirement is to comply with an Air Contaminant Discharge Permit condition.
- b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

A portion of the waste product is converted into a salable or usable commodity consisting of pure TCE.

- 2) The estimated annual percent return on the investment in the facility.

The 122,738 gallons per year TCE recovered by the claimed facility is worth \$617,372 per year at the TCE value of \$5.03 per gallon. The annual operating expenses are \$675,786 resulting in an annual operating loss of \$58,414. The resulting return on investment is zero.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

There is no known alternative.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

See items 1 and 2 above.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or to recycling or properly disposing of used oil.

There are no other factors to consider in establishing the actual cost of the facility properly allocable to prevention, control or reduction of pollution.

The actual cost of the facility properly allocable to pollution control as determined by using this factor is 100%.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department to control air pollution.
- c. The facility complies with permit conditions.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$2,102,951.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-2215.

Ray Potts:ds  
PO\AH12166  
(503) 229-6093  
(3/6/91)

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

---

1. Applicant

Gregory Affiliates, Inc.  
Gregory Forest Products, Inc.  
4800 S.W. Griffith Drive  
Beaverton, OR 97005

The applicant owns and operates a veneer plant in Klamath Falls, Oregon.

Application was made for tax credit for a water pollution control facility.

2. Description of Facility

The claimed facility consists of log chest with a closed recirculation block heating system. The closed recirculation system includes pumps, heat exchangers, nozzles, trash conveyor and associated plumbing and electrical controls.

Claimed Facility Cost: \$1,415,606.00\*  
(Accountant's Certification was provided).

- \* The final tax credit application showed the claimed facility cost of \$1,423,708 and certified by Price Waterhouse. Based on a letter from Stoel Rives Boley Jones & Grey, attorneys for Gregory Affiliates, Inc. dated October 13, 1989, cost of claimed facility was adjusted to \$1,415,606.

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190 and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that:

- a. The request for preliminary certification was filed October 11, 1985, less than 30 days before construction commenced in November 1, 1985. However, preliminary certification approval was granted October 21, 1985.

- b. The request for preliminary certification was approved before application for final certification was made.
- c. Construction of the facility was substantially completed on February 7, 1986. The application was received on December 8, 1987 and additional information was requested on November 18, 1988. The requested additional information was received on January 20, 1989, October 13, 1989, January 16, 1990, July 24, 1990 and January 14, 1991. The application was considered complete on January 14, 1991. Long delays in obtaining requested accurate supporting information for the tax credit from the applicant were caused in part by changes in Department staff to process the application and difficulty of itemizing the claimed cost of the facility. The claimed facility was all subcontracted to an outside construction company on a turn key basis. Furthermore, there were lengthy discussions on the eligibility for tax credit of the entire constructed facility.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department, to control water pollution.

About the end of 1984, the Department required Gregory Forest Product, Inc. (GFPI) to eliminate the discharge of log conditioning water from a log chest to the Klamath Lake. In response to the requirement, GFPI submitted a request for preliminary certification for tax credit to replace the existing log chest. The proposed pollution control facilities were described as heat exchanger and a condensate recirculation system to the deaerator in the boiler house. The Department identified the project as heat exchanger for closed cycle log conditioning system and granted approval for construction and preliminary tax credit certification.

GFPI submitted a final tax relief application for the whole log chest facility, claiming a total facility cost of \$1,423,708. The cost included the log chest, condensate recirculation system, debris and trash conveyor system, associated plumbing and electrical controls, engineering fee and site preparation. The total cost was revised to \$1,415,606 by a letter received on October 13, 1989.

The company claimed the whole constructed log chest facility as pollution control and should be granted tax credit. They based their claim on the interpretation of Oregon Revised Statutes (ORS) 468.155 (1) in that the facility was reconstructed with the principal and sole purpose of eliminating the wastewater discharge from the old log chest to the Klamath Lake. The existing log chest is claimed to be functioning adequately as production equipment except that it can not meet the requirement for controlling discharge of condensate to the Klamath Lake. In order for the company to comply with the requirement to eliminate the discharge, the existing log chest was torn down and a new log chest was constructed. The new log chest included a recirculation system. On this basis, they concluded that the reconstructed facility in its entirety should be eligible for tax credit.

Gregory Forest Products met the criteria for principal purpose to comply with a requirement imposed by the Department in order for the facility to be eligible for tax credit. In evaluating this tax credit application, the Department analyzed each major component of the project to ascertain its eligibility for tax credit. As required by rules, control of pollution should be accomplished by the disposal or elimination of or redesign to eliminate industrial waste.

Prior to construction of the claimed facility, the existing log chest was being used to condition wood blocks for the peeling of veneer. Wood blocks in the log chest were heated by steam. Most of the steam condensate was drained from the log chest into a ditch and discharged to the Klamath Lake. The log chest by itself was production equipment. Its main purpose was to contain the wood blocks to be treated. In the newly constructed log chest, the same configuration is used. The only difference is that the new log chest includes a closed recirculation system for the hot water. The floors were sloped to the center of each of the 6 compartments which serve as collection canals for the hot water which discharges to a recirculation sump. The hot water is screened and pumped back to the heat exchanger prior to reuse for softening the wood blocks. The closed recirculation system has eliminated the discharge of condensate to the Klamath Lake.

In addition, the trash conveyor is installed to remove debris and trash from the hot water prior to pumping back to the heat exchangers. The recirculation system requires the removal of debris. The old log chest did not have the trash conveyor system.

The company also claimed that the old log chest has cracks on the walls and floors and they feared that condensate seeped to the ground and eventually into the Klamath Lake. The reconstruction of the log chest prevents such seepage. There was no documentation of claimed seepage problem as reflected in the Department's file. The company provided no specific data or documentation other than an affidavit of the engineer employed by the company inferring that the construction of new floors will prevent condensate seepage to groundwater.

The closed recirculation system, trash conveyor and associated plumbing and electrical systems are discrete portions of the claimed facility that are determined as pollution control equipment.

An inspection of the constructed facility conducted by the Department showed that the condensate discharge to the Klamath Lake was eliminated.

b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The facility does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no return on investment on this facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The company considered retrofitting the existing log chest with a closed recirculation system. However, it was found that the site elevation does not allow the conversion. The company considered also a submersion system. However, the submersion system needed an elaborate system of handling contaminated water and was found to be more expensive.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

There is no savings from the facility. The cost of maintaining and operating the facility is \$69,025 annually.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or to recycling or properly disposing of used oil.

The company claimed the entire newly constructed log chest as a pollution control with a total cost of \$1,415,606. Although the log chest is considered as production equipment and does not normally qualify as a pollution control system, the Department required the company to control discharge from the old log chest. The company elected to tear down the existing log chest and build a new one. It was determined by the company that this was the cheapest way of complying with the requirements of the Department. However the project resulted in Gregory Forest Products getting a new log chest. In time, the existing log chest would have been replaced anyway.

The company bought the mill in 1981 which included the old log chest. It was estimated that the log chest was built in 1966. When the old log chest was torn down in 1984, the remaining life was estimated to be 20 years. Therefore, the design life of the log chest is 38 years. GFPI claimed that the new log chest has the same design useful life as the old log chest but identified a useful life of 20 years. The Department's position is

that the useful life should be the same as the old log chest since it is of the same design and function. Since the useful life of the log chest is about 38 years and the remaining life at the time of replacement was 20 years the applicant benefitted by constructing a new log chest. Gregory Forest Products through its attorney was notified about the recommendation of staff regarding the eligibility of the log chest as pollution control. It is the Department's position that the cost of the log chest allocable to pollution control should be limited only to the cost proportional to its remaining life. This recommendation is consistent with prior Commission actions (Portland General Electric Co. Application Nos. T-2349 and T-1840). Gregory Forest Products has not expressed concurrence with the Department's recommendation.

The major components of the claimed facility are the log chest structure and the recirculation and trash conveyor systems. The cost of the claimed facility includes engineering fee and site preparation. To determine the cost of engineering and site preparation associated to each major component, cost is prorated.

The company estimated that 90% of the engineering activity was for the design of the recirculation system since the same log chest configuration was used. So 90% of the engineering cost is associated with the pollution control system. The cost for site preparation is prorated on the basis of the cost of the pollution control. The following is the cost breakdown:

Claimed facility cost	\$1,415,606
Recirculation system (includes labor and materials)	= \$651,130
Engineering fee (90% associated to the recirculation system (.90 x 22,532))	= 20,279
Trash conveyor system	= <u>59,364</u>
Total recirculation and conveyor system	\$730,773



Log chest structure	= \$464,469
Engineering fee (10% associated to the log chest (0.10 x 22,532))	= 2,253
	<hr/>
Total log chest	\$466,722

Design useful life: 38 yrs., remaining  
life (1984): 20 years.

Log chest associated to pollution control based on remaining life (20/38 x 466,722)	= \$245,496
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Total site preparation cost for claimed facility (1,415,606 - 730,773 - 466,722)	= \$218,111
--	-------------

Site preparation associated to recirculation & conveyor system	= \$133,047
<u>730,773</u> x 218,111	
730,733 + 466,722	

Site preparation associated to the log chest (218,111 - 133,047)	= \$ 85,064
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The portion of the total claimed facility cost that  
is allocable to pollution control is as follows:

Recirculation system	\$651,130
Trash conveyor system	59,364
Engineering fee	20,279
Site preparation	133,047
Log chest	<u>245,496</u>
	\$1,109,316

<u>1,109,316</u> x 100 = 78%
1,415,606

The actual cost of the facility properly allocable to  
pollution control as determined by using these factors  
is 78%.

5. Summation

- a. The facility was constructed in accordance with all  
regulatory deadlines.

- b. The facility is eligible for final tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department to control water pollution and accomplishes this purpose by redesign to eliminate industrial waste as defined in ORS 468.700.
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 78%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$1,415,606 with 78% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-2395.

RCDulay:CRW  
IW\WC8011  
(503) 229-5876  
April 6, 1990 (Revised March 22, 1991)

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Weyerhaeuser Company  
Klamath Falls Operation  
P.O. Box 9  
Klamath Falls, OR 97601

The applicant owns and operates a particleboard production facility in Klamath Falls, Oregon

Application was made for tax credit for an air pollution control facility.

2. Description of Facility

The claimed facility is a stationary, close fitting containment hood and a two piece pivoting front cover on the Raw Material Storage (RMS) truck dump hopper.

Claimed Facility Cost: \$39,308.00  
(Accountant's Certification was provided).

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that:

- a. The request for preliminary certification was filed October 11, 1988 more than 30 days before construction commenced on November 11, 1988.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Construction of the facility was substantially completed on December 17, 1988 and the application for final certification was received on April 30, 1990, within 2 years of substantial completion of the facility.

4. Evaluation of Application

- a. The facility is eligible because the sole purpose of the facility is to control a substantial quantity of air pollution. This control is accomplished by a modification to eliminate air contaminants as defined in ORS 468.275.

An inspection by DEQ personnel indicates that the facility is adequately containing fugitive dust and is in compliance with emission standards and Air Contaminant Discharge Permit conditions.

b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

This is not a solid waste, hazardous waste, or used oil recycling or resource recovery facility and therefore this factor is not applicable.

- 2) The estimated annual percent return on the investment in the facility.

The small amount of wood fines collected would have negligible economic value. There is no financial benefit to the company from operating the facility, hence no return on the investment and 100% of the claimed and documented costs should be allocated as pollution control tax credit.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

Alternative methods reviewed included a belt conveyor from RMSII to RMS building at a cost of \$160,000 and a high pressure pneumatic conveying system at a cost of \$335,000.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

There is no savings or increase in costs as a result of the facility modification.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or to recycling or properly disposing of used oil.

There are no other factors to consider in establishing the actual cost of the facility properly allocable to prevention, control or reduction of pollution.

The actual cost of the facility properly allocable to pollution control as determined by using this factor or these factors is 100 %.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the sole purpose of the facility is to control a substantial quantity of air pollution and accomplishes this purpose by a modification to eliminate air contaminants as defined in ORS 468.275.
- c. The facility complies with DEQ statutes and rules and permit conditions.
- d. The portion of the facility cost that is properly allocable to pollution control is 100 %.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$39,308 with 100 % allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-2644.

John J. Ruscigno:ds

PO\AHL2102

(503) 229-6480

02/25/91

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Roseburg Paving Co.  
P.O. Box 1427  
Roseburg, OR 97470

The applicant owns and operates an asphaltic concrete plant in Roseburg, Oregon.

Application was made for tax credit for an air pollution control facility.

2. Description of Facility

Claimed facility is an Astec Industries Model DMC-4014 Asphalt Coater.

Claimed Facility Cost: \$141,801.06  
(Accountant's Certification was provided).

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that:

- a. The request for preliminary certification was filed January 12, 1989. Installation commenced on April 2, 1989.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Installation of the facility was substantially completed on April 24, 1989 and the application for final certification was found to be complete on February 7, 1991, within 2 years of substantial completion of the facility.

4. Evaluation of Application

- a. The facility is eligible because the sole purpose of the facility is to reduce a substantial quantity of air pollution.

This reduction is accomplished by redesign to eliminate air contaminants as defined in ORS 468.275.

Discussion (Odor-Opacity Reduction)

Roseburg Paving Co. owns and operates a stationary Astec drum mix asphaltic concrete plant on Beaver State Road in Roseburg, Oregon. The name "drum mix" comes from the process flow description. The aggregate is carried through a rotating drum. At the inlet end of the drum a large natural gas flame heats the aggregate to (1) drive off moisture; and (2) raise the rock temperature to 300°-325°F. Two-thirds of the way through the drum, liquid asphalt is sprayed into the aggregate. In the last one-third of the drum, the heated aggregate and liquid asphalt mix into a homogeneous form called "hot mix".

In a standard drum mix plant, liquid asphalt is added in the drum close to the flame. When asphalt is exposed to high temperatures the light ends are vaporized and entrained in the exhaust gas stream. When the volatiles escape into the atmosphere and condense, the stack opacity can be in violation and excessive odors may occur.

The solution to reducing opacity and odor is to reduce the mix temperature. This is impractical, as hot mix must be installed at high temperatures. By moving the liquid asphalt spray point to the discharge end of the drum and away from the flame, opacity and odor are greatly diminished; however, other means must be provided to mix the aggregate and asphalt. The coater and external pugmill were installed for this purpose. The opacity and odor violations have been eliminated.

b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The facility does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no return on investment because there are no economic benefits from these installations.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

There is no known alternative.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

There is no savings or increase in costs as a result of the facility modification.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or to recycling or properly disposing of used oil.

There are no other factors to consider in establishing the actual cost of the facility properly allocable to prevention, control or reduction of pollution.

The actual cost of the facility properly allocable to pollution control as determined by using these factors is 100%.

##### 5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the sole purpose of the facility is to reduce a substantial quantity of air pollution and accomplishes this purpose by redesign to eliminate air pollution as defined in ORS 468.700.
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.



6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$141,801.06 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-2709.

Bob Harris:ds  
PO\AH12103  
(503) 229-5259  
2-25-91

State of Oregon  
Department of Agriculture

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Jens Reerslev, President  
Reerslev Farms, Inc.  
220 E. 18th Street  
Junction City, Oregon 97448

The applicant owns and operates a grass seed farm operation in Junction City, Oregon.

Application was made for tax credit for an air pollution control facility.

2. Description of Claimed Facility

The facility described in this application is 234' x 60' x 22' pole construction, grass seed straw storage shed located at 93962 Strome Lane, Junction City, Oregon. The land and buildings are owned by the applicant.

Claimed facility cost: \$66,472.04  
(Accountant's Certification was provided.)

3. Description of farm operation plan to reduce open field burning.

Prior to construction of the storage facility, the applicant had 150 perennial acres under grass seed cultivation. Straw was baled off the fields "with hopes of selling...before fall rains hit." Unsold straw was burned in stacks.

The applicant increased his perennial grass seed production from 150 to 400 acres. To refrain from open field burning the applicant contracted with a custom baler and straw broker to remove the residue from the fields. The baler/broker requires the applicant to provide storage for the baled straw. The applicant felt that this was the most economical choice to prevent air pollution from open field burning or stack burning for all the perennial acreage.

4. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16. The facility has met all statutory deadlines in that:

Construction of the facility was substantially completed on August 1, 1989, and the application for final certification was found to be complete on March 15, 1991. The application was submitted within two years. The request for preliminary certification was approved on December 21, 1988.

5. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to reduce a substantial quantity of air pollution.

This reduction is accomplished by reduction of air contaminants, defined in ORS 468.275; by reducing the maximum acreage to be open burned in the Willamette Valley as required in OAR 340-26-013; and, the facility's qualification as a "pollution control facility", defined in OAR 340-16-025(2)(f)(A): "Equipment, facilities, and land for gathering, densifying, processing, handling, storing, transporting and incorporating grass straw or straw based products which will result in reduction of open field burning."

- b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

1. The extent to which the facility is used to recover and convert waste products into a salable or usable commodity. --

The facility promotes the conversion of a waste product (straw) into a salable commodity by providing protection from the weather until it can be delivered to market.

2. The estimated annual percent return on the investment in the facility.

The actual cost of the claimed facility (\$66,472.04) divided by the average annual cash flow (\$3,260) equals a return on investment factor of 20.4. Using Table 1 of OAR 340-16-030 for a life of 20 years, the annual percent return on investment is 0%. Using the annual percent return of 0% and the reference annual percent return of 18.3%, 100% is allocable to pollution control.

3. The alternative methods, equipment and costs for achieving the same pollution control objective.

The method chosen is an accepted method for reduction of air pollution. The method is one of the least costly, most effective methods of reducing air pollution.

4. Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

There is no savings or increase in costs as a result of the facility.

5. Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air pollution.

There are no other factors to consider in establishing the actual cost of the facility properly allocable to prevention, control or reduction of air pollution.

The actual cost of the facility properly allocable to pollution control as determined by using these factors is 100%.

6. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the principal purpose of the facility is to reduce a substantial quantity of air pollution and accomplishes this purpose by the reduction of air contaminants, as defined in ORS 468.275.
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility that is properly allocable to pollution control is 100%.

7. Reviewer's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$66,472.04, with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application Number TC-2710.

Jim Britton, Manager  
Smoke Management Program  
Natural Resources Division  
Oregon Department of Agriculture  
(503) 378-6792

JB:bmTC2710  
March 15, 1991

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Morse Bros., Inc.  
Progress Quarry Division  
32260 Hwy 34  
Tangent, OR 97389

The applicant owns and operates an Asphaltic concrete plant at 14515 Scholls Ferry Road in Beaverton, OR.

Application was made for tax credit for an air pollution control facility.

2. Description of Facility

Claimed facility is a Standard Haven reverse pulse baghouse; ID# 211-1732, Ser.No. #93620.

Claimed Facility Cost: \$126,506.00  
(Accountant's Certification was provided).

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that:

a. The request for preliminary certification was filed April 12, 1989.

b. The request for preliminary certification was approved before application for final certification was made.

c. Installation of the facility was substantially completed on August 5, 1989 and the application for final certification was found to be complete on February 13, 1991, within 2 years of substantial completion of the facility.

4. Evaluation of Application

a. The facility is eligible because the sole purpose of the facility is to reduce a substantial quantity of air pollution.

This reduction is accomplished by elimination of air contaminants, as defined in ORS 468.275.

Discussion:

In 1988, Morse Bros., Inc. purchased Progress Quarries in Beaverton. The quarry had been used for many years as a rock crushing operation. Morse Bros. added a ready mix concrete plant and an asphaltic concrete plant to the quarry site. In recent years, residential housing units have been built against the quarry rim.

The large increase in quarry activity and residential building triggered many complaints of excess air pollution and noise. In 1988, complaints required more than 20 DEQ visits to the site and complaining neighbors. On August 10, 1988, a Notice of Violation was issued for excessive dust from crushing activity.

Morse Bros., Inc. was sensitive to neighbor concerns and addressed all environmental issues raised.

One issue was emissions from the asphalt plant scrubber exhaust stack. Although no visible emission violations were documented, the current large steam plume from the scrubber water and 5-10% opacity were not acceptable to the neighbors. Morse Bros., Inc. agreed to replace the wet scrubber with a baghouse to satisfy these concerns.

All environmental issues at this site have now been settled to the satisfaction of neighbors and no complaints are being received.

b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The facility does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no return on investment because there are no economic benefits from this installation.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

There is no known alternative. The location of the plant on the quarry floor surrounded by hills created a fall-out problem with the previous wet wash system which was not acceptable to the neighbors.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

There is no savings or increase in costs as a result of the facility modification.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or to recycling or properly disposing of used oil.

There are no other factors to consider in establishing the actual cost of the facility properly allocable to prevention, control or reduction of pollution.

The actual cost of the facility properly allocable to pollution control as determined by using these factors is 100%.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the sole purpose of the facility is to reduce a substantial quantity of air pollution and accomplishes this purpose by the elimination of air pollution as defined in ORS 468.700.
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$126,506.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-2862.

Bob Harris:ds  
PO\AH12093  
(503) 229-5259  
(2-25-91)



State of Oregon  
Department of Environmental Quality  
TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Weyerhaeuser Company  
Klamath Falls Operation  
P.O. Box 9  
Klamath Falls, OR 97601

The applicant owns and operates a particleboard production facility in Klamath Falls, Oregon.

Application was made for tax credit for an air pollution control facility.

2. Description of Facility

The facility consists of three Clarke Pneu-Aire baghouse filters. Two of the baghouse filters control wood particle emissions from the core furnish cyclone (PB9), the surface finish cyclone (PB10), and a new cyclone (PB25) which replaced the Carter day filter above the bins. The third baghouse filter controls wood particle emissions from the surface dryer cyclones (PB5, PB6, and PB18).

Claimed Facility Cost: \$423,005.00  
(Accountant's Certification was provided).

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that:

- a. The request for preliminary certification was filed May 8, 1989, less than 30 days before construction commenced on June 4, 1989. However, according to the process provided in OAR 340-16-015(1)(b), the application was reviewed by DEQ staff and the applicant was notified that the application was complete and that construction could commence.

- b. The request for preliminary certification was approved before application for final certification was made.
- c. Construction of the facility was substantially completed on September 4, 1989 and the application for final certification was found to be complete on February 12, 1991, within 2 years of substantial completion of the facility.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department to control air pollution. The requirement is to comply with Notice of Noncompliance AQ-CR-88-46, dated September 21, 1988 which identified opacity problems with the cyclones that the installed baghouse filters are now controlling. The Department inspected the facility on April 11, 1990 and July 24, 1990 and found the previously cited opacity problems to be resolved.

b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The facility does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

Average annual cash flow is a negative \$9,800. This reflects zero gross annual income and estimated annual maintenance costs of the baghouses. The resultant percent return on investment is zero and the percent allocable to pollution control is 100%.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The Department knows of no reasonable alternative.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

There are no savings to the applicant from operating the facility. The annual cost of maintaining and operating the facility is estimated at \$9,800 and would easily exceed any possible savings from recycling the captured material.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or to recycling or properly disposing of used oil.

There are no other factors to consider in establishing the actual cost of the facility properly allocable to prevention, control or reduction of pollution.

The actual cost of the facility properly allocable to pollution control as determined by using this factor or these factors is 100 %.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department to control air pollution.
- c. The facility complies with permit conditions.
- d. The portion of the facility cost that is properly allocable to pollution control is 100 %.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$423,005 with 100 % allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-2907.

John J. Ruscigno:a  
PO\AH12027  
(503) 229-6480

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Atochem North America  
Inorganic Chemicals Division  
P.O. Box 4102  
Portland, OR 97208

The applicant owns and operates an electrochemical plant in Portland, Oregon, which produces chlorine, hydrochloric acid, sodium hydroxide, sodium chlorate and hydrogen.

Application was made for tax credit for a water pollution control facility.

2. Description of Facility

The claimed pollution control facility is a secondary containment system for process chemicals, which consists primarily of a concrete slab and curbs. The containment system is intended to trap spilled chemicals and route them to a storage pond and wastewater treatment system before discharge.

Claimed Facility Cost: \$43,482.15

The claimed costs are:

Labor	\$ 20,144.67
Materials	21,612.48
(Concrete, rebar, gravel)	
Engineering	<u>1,725.00</u>
Total	\$43,482.15

Accountant's Certification was provided.

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190 and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that:

- a. The request for preliminary certification was filed April 26, 1989, less than 30 days before construction commenced on May 10, 1989. However, according to the process provided in OAR 340-16-015(1)(b) under the earlier tax-credit rules, application was reviewed by DEQ staff and the applicant was notified that the application was complete and that construction could commence.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Construction of the facility was substantially completed on January 5, 1990 and the application for final certification was filed on July 6, 1990, within two years of substantial completion of the facility.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to prevent a substantial quantity of water pollution.

Only minimal containment capability existed in this area of the plant prior to installation of this system. In February, 1989, a tank containing sodium hydroxide ruptured in the area and allowed the chemical to escape to the sewer system, resulting in exceedance of Atochem's permitted pH discharge limit.

The installed facility was inspected on December 3, 1990, by the Northwest Region Office of the Department. The facility was found to be constructed according to the plans but it was noted that the largest sodium hydroxide tank is situated closely enough to the containment wall so that the tank could fall outside the containment and spill into the adjacent roadway.

Secondary spill containment systems, especially those constructed around existing facilities where space is at a premium, are not necessarily designed to contain catastrophic events such as heavy surges from massive ruptures or tanks which may fall outside the containment area. The Department has no acceptability criteria to address such catastrophic events and has granted tax credit on such facilities in the past on the premise that they are intended to contain the more likely operational kinds of leaks.

Atochem has had continuing difficulty meeting permit discharge limits for pH, TSS and chromium. Meeting the chromium limit is the most difficult, primarily because the permit limit is based on a chromium concentration that is near the analytical detection level.

None of Atochem's recent permit-limit excursions are related to this facility, however, so they are in compliance as far as this facility is concerned.

b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The facility does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

The facility produces no revenue or cost savings so the return on investment is zero.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

Atochem concluded this method of containment was the most appropriate. Earthen dikes were considered but there was not enough room to construct them.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

There are no savings as a result of the installation of this facility.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or to recycling or properly disposing of used oil.

There are no other factors to consider in establishing the actual cost of the facility properly allocable to prevention, control or reduction of pollution.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the principal purpose of the facility is to prevent a substantial quantity of water pollution and accomplishes this purpose by the elimination of industrial waste as defined in ORS 468.700.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$43,482.15 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-2922.

Jerry E. Turnbaugh  
(503) 229-5374  
IW\WC8031  
March 12, 1991

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Temple Distributing, Inc.  
212 Terminal Ave.  
The Dalles, OR 97058

The applicant leases and operates a cardlock station at 1025 W. 8th Place, The Dalles OR, facility no. 439.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of spill containment basins, tank monitor with overflow alarm, automatic shutoff valves and line leak detectors.

Claimed facility cost	\$ 12,822
(Documentation of cost was provided)	

Percent allocable to pollution control	100%
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3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed on September 23, 1989 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation on July 7, 1989.



4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of two asphalt coated steel tanks and steel piping with no corrosion protection and no spill and overfill prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For spill and overfill prevention - Spill containment basins, overfill alarm & automatic shutoff valves.
- 2) For leak detection - Line leak detectors and tank monitor system.

The applicant reported that the soil was inspected during construction of the project and no evidence of contamination was found.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that all of the costs claimed by the applicant (\$12,822) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	Eligible Facility Cost	Percent Allocable	Amount Allocable
<b>Spill &amp; Overfill Prevention:</b>			
Spill containment basins	\$ 543	100%	\$ 543
Automatic shutoff valves	538	100	538
<b>Leak Detection:</b>			
Tank monitor	4,528	90(1)	4,075
Line leak detectors	340	100	340
Labor & materials	<u>6,873</u>	<u>100</u>	<u>6,873</u>
Total	\$12,822	96%	\$12,369

- (1) The applicant's cost for a tank monitor is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 96%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$12,822 with 96% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-2935.

Barbara J. Anderson:ew  
(503) 229-5870  
February 28, 1991

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Weyerhaeuser Company  
Klamath Falls Operation  
P.O. Box 9  
Klamath Falls, OR 97601

The applicant owns and operates a wood products facility in Klamath Falls, Oregon.

Application was made for tax credit for an air pollution control facility.

2. Description of Facility

The claimed facility is a FMC Vanguard 8000 regenerative air (vacuum) type street sweeper, serial number J8DM7AIN9H3108123.

Claimed Facility Cost: \$90,526.00 (Accountant's Certification was provided).

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that:

- a. The request for preliminary certification was filed May 30, 1989, less than 30 days before installation commenced on June 16, 1989. However, according to the process provided in OAR 340-16-015(1)(b), the application was reviewed by DEQ staff and the applicant was notified that the application was complete and that installation could commence.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Installation of the facility was substantially completed on June 16, 1989 when the street sweeper arrived on site. The unit was placed in operation on July 3, 1989 and the application for final certification was found to be complete on February 12, 1991 within 2 years of substantial completion of the facility.

#### 4. Evaluation of Application

a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department to control fugitive emissions on the site. Notice of Noncompliance (AQ-CR-88-46), dated September 21, 1988, required Weyerhaeuser to develop a fugitive control plan to correct problems associated with large amounts of plant site wood dust accumulations resulting in off-site fallout problems during windy conditions. The Department approved the purchase and operation of the street sweeper on June 9, 1989 as being used for regular site cleanup. Site inspections subsequent to placing the street sweeper in operation have failed to identify fugitive emission problems related to site cleanup.

#### b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

This is not a solid waste, hazardous waste, or used oil recycling or resource recovery facility and therefore this section is not applicable.

- 2) The estimated annual percent return on the investment in the facility.

Average annual cash flow is a negative \$11,170. This results from the estimated annual operating expenses for the first five years of \$57,000 (1989 year-to-date operating expenses projected to a full year and summed for the first 5 years) less the gross annual income for the first five years of \$1150 (estimated value of recovered hogged fuel). Therefore, by using the return on investment formula, 100% of the facility cost would be allocable to pollution control.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The Department knows of no other as-effective alternatives to scheduled site cleanup.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The company estimates an annual average savings from recycling fugitive wood particles that are not contaminated with dirt and rocks of \$230. The cost of maintaining and operating the facility averages \$11,400 over the first 5 years. These costs have been considered in calculating the annual return on investment.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or to recycling or properly disposing of used oil.

There are no other factors to consider in establishing the actual cost of the facility properly allocable to prevention, control or reduction of pollution.

The actual cost of the facility properly allocable to pollution control as determined by using this factor or these factors is 100 %.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department to control air pollution.
- c. The facility complies with permit conditions.
- d. The portion of the facility cost that is properly allocable to pollution control is 100 %.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$90,526.00 with 100 % allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-2943.

John J. Ruscigno:a  
PO\AH12058  
(503) 229-6480  
2/19/91

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

C & D Lumber Company, Inc.  
1182 Pruner Road  
Riddle, OR 97469

The applicant owns and operates a lumber mill at 1182 Pruner Rd., Riddle OR, facility no. 9093.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of one fiberglass tank and piping, spill containment basin, overflow valve and monitoring well.

Claimed facility cost (Documentation of cost was provided)	\$ 8,101
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Percent allocable to pollution control	100%
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3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed in November, 1989 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in November, 1989.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of one bare steel tank and piping with no corrosion protection and no spill and overflow prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Fiberglass tank and piping.
- 2) For spill and overflow prevention - Spill containment basin and overflow valves.
- 3) For leak detection - Monitoring well.

The applicant reported that soil testing was performed at the time of tank removal and no contamination was found.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that the eligible facility cost for the project is \$7,551. This represents a difference of \$550 from the applicant's claimed cost of \$8,101 due to a determination by the Department that the cost of a pump (\$550) is not eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:



- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant considered the method chosen to be the best based on recommendations. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
Corrosion Protection:			
Fiberglass tank & piping	\$ 2,477	36%(1)	\$ 892
Spill & Overflow Prevention:			
Spill containment basin	200	100	200
Overflow valve	272	100	272
Leak Detection:			
Monitoring well	128	100	128
Labor & material	<u>4,474</u>	<u>100</u>	<u>4,474</u>
Total	\$ 7,551	79%	\$ 5,966

- (1) The Department has determined the percent allocable on the cost of a corrosion protected tank and piping system by using a formula based on the difference in cost between the protected tank system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$2,477 and the bare steel system is \$1,581, the resulting portion of the eligible tank and piping cost allocable to pollution control is 36%.

#### 5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 79%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$7,551 with 79% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-2970.

Barbara J. Anderson:ew  
(503) 229-5870  
February 20, 1991

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Smart Mart, Inc.  
919 SW Taylor #300  
Portland, OR 97205

The applicant owns and operates a grocery store and gas station at 4031 N. Highway 101, Lincoln City OR, facility no. 9945.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the new installation of three STI-P3 double wall tanks and double wall fiberglass piping, spill containment basins, automatic shutoff valves, tank monitor, sumps and and oil/water separator.

Claimed facility cost \$ 74,238  
(Accountant's certification was provided)

Percent allocable to pollution control 100%

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed on December 30, 1989 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation on December 30, 1989.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

This is a new business. Prior to the installation of pollution control, the facility consisted of a vacant lot on which underground storage tanks had once been located and removed by a previous owner.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Three STI-P3 double wall tanks and double wall fiberglass piping.
- 2) For spill and overflow prevention - Spill containment basins, automatic shutoff valves & sumps.
- 3) For leak detection - Tank monitor.

The applicant also installed an oil/water separator.

The applicant reported that some contamination was found at the site and the previous owner is performing the cleanup.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that the eligible facility cost for the project is \$60,998. This represents a difference of \$13,240 from the applicant's claimed cost of \$74,238 due to a determination by the Department that the cost of labor to install tanks and piping at a new business facility is not eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant considered the method chosen to be the best pollution control method. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
<b>Corrosion Protection:</b>			
STI-P3 tanks & fiberglass piping	\$33,275	37%(1)	\$12,312
<b>Spill &amp; Overflow Prevention:</b>			
Spill containment basins	5,454	100	5,454
Automatic shutoff valve	576	100	576
Sumps	1,868	100	1,868
<b>Leak Detection:</b>			
Tank monitor	8,203	90 (2)	7,383
Oil/water separator	1,800	100	1,800
Labor & materials	<u>9,822</u>	<u>100</u>	<u>9,822</u>
Total	\$60,998	64%	\$39,215

- (1) The Department has determined the percent allocable on the cost of a corrosion protected piping system by using a formula based on the difference in cost between the protected system and an equivalent steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected piping system cost is \$33,275 and the steel system is \$20,984, the resulting portion of the eligible piping cost allocable to pollution control is 37%.
- (2) The applicant's cost for a tank monitor is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

## 5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.

- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 64%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$60,998 with 64% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-2980.

Barbara J. Anderson:ew  
(503) 229-5870  
March 14, 1991



State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Merritt Truax, Inc.  
PO Box 2099  
Salem, OR 97308

The applicant owns and operates a cardlock facility at 3025 Industrial Way NE, Salem OR, facility no. 3627.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of leak detection and overflow prevention on ten underground storage tanks in the form of automatic tank gauges and overflow alarm.

Claimed facility cost \$ 26,864  
(Accountant's certification was provided)

Percent allocable to pollution control 100%

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed on January 31, 1990 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation on February 1, 1990.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of ten bare steel underground storage tanks with no corrosion protection, overfill prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For overfill prevention - Overfill alarm.
- 2) For leak detection - Automatic tank gauges.

The applicant did not indicate if any soil assessment or tank tightness testing was accomplished before undertaking the project.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that the eligible facility cost for the project is \$26,592. This represents a difference of \$272 from the applicant's claimed cost of \$26,864 due to a determination by the Department that the cost of the overfill alarm was claimed at the list price rather than the discount price. Also, the labor amount from the William Michael Co. invoice dated 3/31/89, has been lowered by 20%. The 20% is not eligible pursuant to the definition of a pollution control facility in ORS 648.155 because it is the cost to clean up oil soaked rock under the loading rack.

- b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	Eligible Facility Cost	Percent Allocable	Amount Allocable
Spill & Overfill Prevention:			
Overfill alarm	\$ 83	100%	\$ 83
Leak Detection:			
Automatic tank gauge	10,909	90 (1)	9,818
Labor & materials	<u>15,600</u>	<u>100</u>	<u>15,600</u>
Total	\$26,592	96%	\$25,501

- (1) The applicant's cost for a tank monitor is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 96%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$26,592 with 96% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3205.

Mary Lou Perry:ew  
(503) 229-5731  
March 21, 1991

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Metrofueling  
PO Box 2099  
Salem, OR 97308

The applicant owns and operates a cardlock facility at 680 Center Street NE, Salem OR, facility no. 1789.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of leak detection and overflow prevention in the form of automatic tank gauges and overflow alarm.

Claimed facility cost \$ 10,408  
(Documentation of cost was provided)

Percent allocable to pollution control 100%

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed on January 31, 1990 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation on February 1, 1990.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of four bare steel underground storage tanks with no corrosion protection, overfill prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For overfill prevention - Overfill alarm.
- 2) For leak detection - Automatic tank gauge.

The applicant did not indicate if any soil assessment or tank tightness testing was accomplished before undertaking the project.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that the eligible facility cost for the project is \$10,308. This represents a difference of \$100 from the applicant's claimed cost of \$10,408 due to a determination by the Department that the cost of the caps and adaptors and the overfill alarm was claimed at the list price rather than the discount price.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	Eligible Facility <u>Cost</u>	Percent <u>Allocable</u>	Amount <u>Allocable</u>
Spill & Overfill Prevention:			
Overfill alarm	\$ 83	100%	\$ 83
Leak Detection:			
Automatic tank gauge	4,934	90 (1)	4,441
Labor & materials	<u>5,291</u>	<u>100</u>	<u>5,291</u>
Total	\$10,308	95%	\$ 9,815

- (1) The applicant's cost for a tank monitor is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 95%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$10,308 with 95% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3209.

Mary Lou Perry:ew  
(503) 229-5731  
March 20, 1991



State of Oregon  
Department of Agriculture

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Venell Farms, Inc.  
Rosetta Venell, Secretary  
30742 Venell Place  
Corvallis, Oregon

The applicant owns and operates a grass seed farm operation in Corvallis, Oregon.

Application was made for tax credit for an air pollution control facility.

2. Description of Claimed Facility

The facility described in this application is a metal clad, pole construction, 106' X 144' X 22' straw storage building, located at 30742 Venell Place, Corvallis, Oregon. The land and buildings are owned by the applicant.

Claimed facility cost: \$53,116  
(Accountant's Certification was provided.)

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16. The facility has met all statutory deadlines in that:

Construction of the facility was substantially completed on September 10, 1989, and the application for final certification was found to be complete on September 25, 1990. The application was submitted within two years of substantial completion of the facility.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to reduce a substantial quantity of air pollution.

This reduction is accomplished by reduction of air contaminants, defined in ORS 468.275; by reducing the maximum acreage to be open burned in the Willamette Valley as required in OAR 340-26-013; and, the facility's qualification as a "pollution control facility", defined in OAR 340-16-025(2)(f)(A): "Equipment, facilities, and land for gathering, densifying, processing,

handling, storing, transporting and incorporating grass straw or straw based products which will result in reduction of open field burning."

The applicant's farming operation includes approximately 2,500 perennial acres of grass seed crops, and in recent years has registered 2,500 acres in the Department's open field burning program for the Willamette Valley. The facility will enable the applicant to reduce acreage to be open burned by approximately 600 acres by providing storage for the straw, thus preserving its marketability.

b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

1. The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The facility promotes the conversion of a waste product (straw) into a salable commodity by providing protection for the straw during the rainy season.

2. The estimated annual percent return on the investment in the facility.

There is no annual percent return on the investment due to the negative average annual cash flow. The applicant claims that it costs \$15 per ton of straw to rake, bale, and transport it to the storage shed while they receive \$7 per ton under existing market conditions.

3. The alternative methods, equipment and costs for achieving the same pollution control objective.

The method chosen is an accepted method for reduction of air pollution. The method is one of the least costly, most effective methods of reducing air pollution.

4. Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

There is an increase in operating costs of \$1,525 to annually maintain and operate the facility. These costs were considered in the return on investment calculation.

5. Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air pollution.

There are no other factors to consider in establishing the actual cost of the facility properly allocable to prevention, control or reduction of air pollution.

The actual cost of the facility properly allocable to pollution control as determined by using these factors is 100%.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the principal purpose of the facility is to reduce a substantial quantity of air pollution and accomplishes this purpose by the reduction of air contaminants, as defined in ORS 468.275.
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility that is properly allocable to pollution control is 100%.

6. Reviewer's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$53,116, with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application Number TC-3242.

Jim Britton, Manager  
Smoke Management Program  
Natural Resources Division  
Oregon Department of Agriculture  
(503) 378-6792

JB:bmTC3242  
March 20, 1991

State of Oregon  
Department of Agriculture

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Venell Farms, Inc.  
Rosetta Venell, Secretary  
30742 Venell Place  
Corvallis, Oregon 97333

The applicant owns and operates a grass seed farm operation in Corvallis, Oregon.

Application was made for tax credit for air pollution control equipment.

2. Description of Claimed Facility

The equipment described in this application is located at 30742 Venell Place, Corvallis, Oregon. The Allen rake is owned by the applicant. Venell Farms, Inc. maintains an annual operating lease with PFS Financial, Inc. for the Freeman carrier and balers. PFS Financial, Inc. released claim to the Pollution Control tax credit.

Allen hay rake	\$15,000
Freeman 1500 baler (2)	137,000
Freeman bale carrier	59,422

Claimed equipment cost: \$211,422  
(Accountant's Certification was provided.)

3. Procedural Requirements

The equipment is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16. The equipment has met all statutory deadlines in that:

Purchase of the equipment was substantially completed on September 1, 1989, and the application for final certification was found to be complete on October 3, 1990. The application was submitted within two years of substantial purchase of the equipment.

4. Evaluation of Application

- a. The equipment is eligible because the principal purpose of the facility is to reduce a substantial quantity of air pollution.

This reduction is accomplished by reduction of air contaminants, defined in ORS 468.275; by reducing the maximum acreage to be open burned in the Willamette Valley as required in OAR 340-26-013; and, the facility's qualification as a "pollution control facility", defined in OAR 340-16-025(2)(f)(A): "Equipment, facilities, and land for gathering, densifying, processing, handling, storing, transporting and incorporating grass straw or straw based products which will result in reduction of open field burning."

The applicant's farming operation includes approximately 2500 perennial acres of grass seed crops, and in recent years has registered 2500 acres in the Department's open field burning program for the Willamette Valley. The equipment will enable the applicant to reduce acreage to be open burned by approximately 2100 acres by enabling them to bale off the straw for storage and marketing.

b. Eligible Cost Findings

In determining the percent of the pollution control equipment cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

1. The extent to which the equipment is used to recover and convert waste products into a salable or usable commodity.

The equipment promotes the conversion of a waste product (straw) into a usable commodity by providing packaging and transportation to storage sheds.

2. The estimated annual percent return on the investment in the equipment.

There is no annual percent return on the investment as applicant claims no gross annual income. The applicant claims that it costs \$15 per ton of straw to rake, bale, and transport it to the storage shed while they receive \$7 per ton under existing market conditions.

The applicant established salvage value by stating that it is their intention to use the equipment until it is worn out and no longer has a value.

3. The alternative methods, equipment and costs for achieving the same pollution control objective.

The method chosen is an accepted method for reduction of air pollution. The method is one of the least costly, most effective methods of reducing air pollution.

4. Any related savings or increase in costs which occur or may occur as a result of the purchase of the equipment.

There is an increase in operating costs of \$11,548 to annually maintain and operate the equipment. These costs were considered in the return on investment calculation.

5. Any other factors which are relevant in establishing the portion of the actual cost of the equipment properly allocable to the prevention, control or reduction of air pollution.

There are no other factors to consider in establishing the actual cost of the equipment properly allocable to prevention, control or reduction of air pollution.

The actual cost of the equipment properly allocable to pollution control as determined by using these factors is 100%.

5. Summation

- a. The equipment was purchased in accordance with all regulatory deadlines.
- b. The equipment is eligible for final tax credit certification in that the principal purpose of the facility is to reduce a substantial quantity of air pollution and accomplishes this purpose by the reduction of air contaminants, as defined in ORS 468.275.
- c. The equipment complies with DEQ statutes and rules.
- d. The portion of the equipment that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$211,422, with 100% allocated to pollution control, be issued for the equipment claimed in Tax Credit Application Number TC-3243.

Jim Britton, Manager  
Smoke Management Program  
Natural Resources Division  
Oregon Department of Agriculture  
(503) 378-6792

JB:bmTC3243  
March 20, 1991

State of Oregon  
Department of Agriculture

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Venell Farms, Inc.  
Rosetta Venell, Secretary  
80742 Venell Place  
Corvallis, Oregon 97333

The applicant owns and operates a grass seed farm operation in Corvallis, Oregon.

Application was made for tax credit for air pollution control equipment.

2. Description of Claimed Facility

The equipment described in this application is a 45' mobile field sanitizer, located at 30742 Venell Place, Corvallis, Oregon. The equipment is owned by the applicant.

Claimed equipment cost: \$35,438  
(Accountant's Certification was provided.)

3. Procedural Requirements

The equipment is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16. The equipment has met all statutory deadlines in that:

Purchase of the equipment was substantially completed on September 1, 1989, and the application for final certification was found to be complete on October 3, 1990. The application was submitted within two years of substantial purchase of the equipment.

4. Evaluation of Application

- a. The equipment is eligible because the principal purpose of the facility is to reduce a substantial quantity of air pollution.

This reduction is accomplished by reduction of air contaminants, defined in ORS 468.275; by reducing the maximum acreage to be open burned in the Willamette Valley as required in OAR 340-26-013; and, the facility's qualification as a "pollution control facility", defined in OAR 340-16-025(2)(f)(B): "Propane flammers or mobile field sanitizers which are alternatives to open field burning and reduce air quality impacts."

The applicant's farming operation includes approximately 2500 perennial acres of grass seed crops, and in recent years has registered 2500 acres in the Department's open field burning program for the Willamette Valley. The equipment will enable the applicant to reduce acreage to be open burned by approximately 1500 acres by providing an alternative sanitization method.

b. Eligible Cost Findings

In determining the percent of the pollution control equipment cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

1. The extent to which the equipment is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity. The field burning machine sanitizes the field after the straw is removed.

2. The estimated annual percent return on the investment in the equipment.

There is no annual percent return on the investment as applicant claims no gross annual income.

The applicant established salvage value by stating their intention to use the equipment until it wears out and no longer has value.

3. The alternative methods, equipment and costs for achieving the same pollution control objective.

The method chosen is an accepted method for reduction of air pollution. The method is one of the least costly, most effective methods of reducing air pollution.

4. Any related savings or increase in costs which occur or may occur as a result of the purchase of the equipment.

There is an increase in operating costs of \$6,650 to annually maintain and operate the equipment. These costs were considered in the return on investment calculation.

5. Any other factors which are relevant in establishing the portion of the actual cost of the equipment properly allocable to the prevention, control or reduction of air pollution.



There are no other factors to consider in establishing the actual cost of the equipment properly allocable to prevention, control or reduction of air pollution.

The actual cost of the equipment properly allocable to pollution control as determined by using these factors is 100%.

5. Summation

- a. The equipment was purchased in accordance with all regulatory deadlines.
- b. The equipment is eligible for final tax credit certification in that the principal purpose of the facility is to reduce a substantial quantity of air pollution and accomplishes this purpose by the reduction of air contaminants, as defined in ORS 468.275.
- c. The equipment complies with DEQ statutes and rules.
- d. The portion of the equipment that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$35,438, with 100% allocated to pollution control, be issued for the equipment claimed in Tax Credit Application Number TC-3244.

Jim Britton, Manager  
Smoke Management Program  
Natural Resources Division  
Oregon Department of Agriculture  
(503) 378-6792

JB:bmTC3244  
March 20, 1991

State of Oregon  
Department of Agriculture

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Nixon Farms, Inc.  
Betty Marguth, Sec/Treas  
96313 Hulbert Road  
Junction City, Oregon 97448

The applicant owns and operates a grass seed farm operation in Junction City, Oregon.

Application was made for tax credit for air pollution control equipment.

2. Description of Claimed Facility

The equipment described in this application is a Rear's 30 ft. swath propane flamer, located at 96313 Hulbert Road, Junction City, Oregon. The equipment is owned by the applicant.

Claimed equipment cost: \$7,076  
(The applicant provided proof of purchase.)

3. Procedural Requirements

The equipment is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16. The equipment has met all statutory deadlines in that:

Purchase of the equipment was substantially completed on September 19, 1990, and the application for final certification was found to be complete on October 2, 1990, within two years of substantial purchase of the equipment.

4. Evaluation of Application

- a. The equipment is eligible because the principal purpose of the facility is to reduce a substantial quantity of air pollution.

This reduction is accomplished by reduction of air contaminants, defined in ORS 468.275; by reducing the maximum acreage to be open burned in the Willamette Valley as required in OAR 340-26-013; and, the facility's qualification as a "pollution control facility", defined in OAR 340-16-025(2)(f)(B): "Propane flammers or mobile field sanitizers which are alternatives to open field burning and reduce air quality impacts."

The applicant's farming operation includes approximately 606 perennial acres of grass seed crops, and in recent years has registered 390 acres in the Department's open field burning program for the Willamette Valley. The equipment will enable the applicant to reduce acreage to be open burned by approximately 64% as it allows him to sanitize the fields by propane flaming after the bulk straw is removed by baling.

b. Eligible Cost Findings

In determining the percent of the pollution control equipment cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

1. The extent to which the equipment is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity. Residue left on the field after baling is burned by the propane flamer.

2. The estimated annual percent return on the investment in the equipment.

There is no annual percent return on the investment as applicant claims no gross annual income.

The applicant established salvage value by stating that a frame weight of 2500 pounds at a scrap metal price of \$20.00 per ton determines the value.

3. The alternative methods, equipment and costs for achieving the same pollution control objective.

The method chosen is an accepted method for reduction of air pollution. The method is one of the least costly, most effective methods of reducing air pollution.

4. Any related savings or increase in costs which occur or may occur as a result of the purchase of the equipment.

There is an increase in operating costs of \$15,600 to annually maintain and operate the equipment. These costs were considered in the return on investment calculation.

5. Any other factors which are relevant in establishing the portion of the actual cost of the equipment properly allocable to the prevention, control or reduction of air pollution.

There are no other factors to consider in establishing the actual cost of the equipment properly allocable to prevention, control or reduction of air pollution.

The actual cost of the equipment properly allocable to pollution control as determined by using these factors is 100%.

5. Summation

- a. The equipment was purchased in accordance with all regulatory deadlines.
- b. The equipment is eligible for final tax credit certification in that the principal purpose of the facility is to reduce a substantial quantity of air pollution and accomplishes this purpose by the reduction of air contaminants, as defined in ORS 468.275.
- c. The equipment complies with DEQ statutes and rules.
- d. The portion of the equipment that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$7,076, with 100% allocated to pollution control, be issued for the equipment claimed in Tax Credit Application Number TC-3247.

Jim Britton, Manager  
Smoke Management Program  
Natural Resources Division  
Oregon Department of Agriculture  
(503) 378-6792

JB:bmTC3247  
October 20, 1990

State of Oregon  
Department of Agriculture

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Michael & Lisa Bodtker  
105 North 7th  
Harrisburg, Oregon 97446

The applicant owns and operates a grass seed farm operation in Junction City, Oregon.

Application was made for tax credit for an air pollution control facility.

2. Description of Claimed Facility

The facility described in this application is a 296' x 119' grass seed straw storage shed located at 94367 Love Lake Road, Junction City, Oregon. The land and buildings are owned by the applicant.

Claimed facility cost: \$79,239  
(Accountant's Certification was provided.)

3. Description of farm operation plan to reduce open field burning.

The applicants have 20 perennial and 270 annual acres of grass seed under cultivation. Prior to the purchase of the straw storage shed, the applicants have disposed of the straw residue on their annual acreage by open field burning.

With the acquisition of the storage facility, the applicants can contract with a custom baler to bale off and store all 270 acres of their annual grass seed straw. With the availability of the storage facility the applicant's neighbors can contract to have baled off and stored an additional 710 acres of grass seed straw. The facility will enable the applicants and their neighbors to remove approximately 1,000 acres from open field burning. The facility enables the custom baler to store the straw until delivered to the end-users.

4. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16. The facility has met all statutory deadlines in that:

Construction of the facility was substantially completed on July 1, 1990, and the application for final certification was found to be complete on March 7, 1991. The application was submitted within two years.

5. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to reduce a substantial quantity of air pollution.

This reduction is accomplished by reduction of air contaminants, defined in ORS 468.275; by reducing the maximum acreage to be open burned in the Willamette Valley as required in OAR 340-26-013; and, the facility's qualification as a "pollution control facility", defined in OAR 340-16-025(2)(f)(A): "Equipment, facilities, and land for gathering, densifying, processing, handling, storing, transporting and incorporating grass straw or straw based products which will result in reduction of open field burning."

- b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

1. The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The facility promotes the conversion of a waste product (straw) into a salable commodity by providing protection for the baled straw from the weather.

2. The estimated annual percent return on the investment in the facility.

The actual cost of the claimed facility (\$79,239) divided by the average annual cash flow derived from facility rent (\$9,500) equals a return on investment factor of 8.341. Using Table 1 of OAR 340-16-030 for a life of 10 years (built approx. 1977), the annual percent return on investment is 3.5%. Using the annual percent return of 3.5% and the reference annual percent return of 18.3%, 81% is allocable to pollution control.

3. The alternative methods, equipment and costs for achieving the same pollution control objective.

The method chosen is an accepted method for reduction of air pollution. The method is one of the least costly, most effective methods of reducing air pollution.

4. Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

There is no savings or increase in costs as a result of the facility.

5. Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air pollution.

There are no other factors to consider in establishing the actual cost of the facility properly allocable to prevention, control or reduction of air pollution.

The actual cost of the facility properly allocable to pollution control as determined by using these factors is 81%.

6. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the principal purpose of the facility is to reduce a substantial quantity of air pollution and accomplishes this purpose by the reduction of air contaminants, as defined in ORS 468.275.
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility that is properly allocable to pollution control is 81%.

7. Reviewer's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$79,239, with 81% allocated to pollution control, be issued for the facility claimed in Tax Credit Application Number TC-3314.

Jim Britton, Manager  
Smoke Management Program  
Natural Resources Division  
Oregon Department of Agriculture  
(503) 378-6792

JB:bmTC-3314  
March 20, 1991

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Corporation  
PO Box 3002  
Corvallis, OR 97339

The applicant owns and operates a retail gas station at 1128 Pacific Blvd., SE, Albany OR, facility no. 6103.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of cathodic protection, fiberglass piping, spill containment basins, automatic shutoff valves and line leak detectors, monitoring wells, sumps and Stage II vapor recovery piping.

Claimed facility cost	\$ 58,084
(Accountant's certification was provided)	

Percent allocable to pollution control	100%
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3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed in July, 1990 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in July, 1990.



4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of three steel tanks and piping with no corrosion protection and no spill and overflow prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Fiberglass piping & cathodic protection.
- 2) For spill and overflow prevention - Spill containment basins, automatic shutoff valves & sumps.
- 3) For leak detection - Line leak detectors & monitoring wells.

The applicant also installed piping for Stage II vapor recovery.

The applicant reported that some contamination was found at the site and cleanup is in progress.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that the eligible facility cost for the project is \$56,817. This represents a difference of \$1,267 from the applicant's claimed cost of \$58,084 due to a determination by the Department that the cost of hoses (\$576), turbines (\$2,116) and labor on the canopy, dispensers and turbines (\$600) is not eligible pursuant to the definition of a pollution control facility in ORS 468.155 and that the cost of sumps (\$2,025) which were not claimed by the applicant is eligible.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	Eligible Facility Cost	Percent Allocable	Amount Allocable
<b>Corrosion Protection:</b>			
Fiberglass piping	\$ 4,035	39%(1)	\$ 1,574
<b>Spill &amp; Overflow Prevention:</b>			
Spill containment basins	766	100	766
Automatic shutoff valve	105	100	105
Sumps	2,025	100	2,025
<b>Leak Detection:</b>			
Line leak detectors	582	100	582
Monitoring wells	524	100	524
Labor & materials (includes vapor recovery, piping & cathodic protection)	<u>48,780</u>	<u>100</u>	<u>48,780</u>
<b>Total</b>	<b>\$56,817</b>	<b>96%</b>	<b>\$54,356</b>

(1) The Department has determined the percent allocable on the cost of a corrosion protected piping system by using a formula based on the difference in cost between the protected system and an equivalent steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected piping system cost is \$4,035 and the steel system is \$2,460, the resulting portion of the eligible piping cost allocable to pollution control is 39%.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 96%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$56,817 with 96% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3318.

Barbara J. Anderson:ew  
(503) 229-5870  
February 26, 1991

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Corporation  
PO Box 3002  
Corvallis, OR 97339

The applicant owns and operates a retail gas station at 3410 Commercial St., SE, Salem OR, facility no. 4427.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of cathodic protection on three steel tanks and piping and spill containment basins.

Claimed facility cost	\$ 14,535
(Documentation of cost was provided)	

Percent allocable to pollution control	100%
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3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed in May, 1989 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in May, 1989.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of three epoxy lined steel tanks and steel piping with leak detection and spill and overflow prevention, but no external corrosion protection.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Cathodic protection.
- 2) For spill and overflow prevention - Spill containment basins.

The applicant reported that the soil was inspected during construction of the project and no evidence of contamination was found.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that all of the costs claimed by the applicant (\$14,535) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
Corrosion Protection:			
Cathodic protection	\$ 6,000	100%	\$ 6,000
Spill & Overfill Prevention:			
Spill containment basins	495	100	495
Labor & materials	<u>8,040</u>	<u>100</u>	<u>8,040</u>
Total	\$14,535	100%	\$14,535

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.

- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
  - c. The facility complies with DEQ statutes and rules.
  - d. The portion of the facility cost that is properly allocable to pollution control is 100%.
6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$14,535 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3324.

Barbara J. Anderson:ew  
(503) 229-5870  
February 22, 1991



State of Oregon  
Department of Environmental Quality  
TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Corporation  
PO Box 3002  
Corvallis, OR 97339

The applicant owns and operates a retail gas station at 985 W. Harvard, Roseburg OR, facility no. 4453.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of cathodic protection on three tanks and piping, spill containment basins, automatic shutoff valves and line leak detectors and a tank monitor.

Claimed facility cost \$ 20,316  
(Accountant's certification was provided)

Percent allocable to pollution control 100%

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed in March, 1989 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in March, 1989.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of three steel tanks and piping with no corrosion protection and no spill and overflow prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Cathodic protection.
- 2) For spill and overflow prevention - Spill containment basins & automatic shutoff valves.
- 3) For leak detection - Line leak detectors & a tank monitor.

The applicant reported that the soil was inspected during construction of the project and no evidence of contamination was found.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that the eligible facility cost for the project is \$18,225. This represents a difference of \$2,091 from the applicant's claimed cost of \$20,316 due to a determination by the Department that the cost of installing turbines (\$2,091) is not eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
Corrosion protection:			
Cathodic protection	\$ 6,000	100%	\$ 6,000
Spill & Overfill Prevention:			
Spill containment basins	495	100	495
Automatic shutoff valves	780	100	780
Leak Detection:			
Line leak detectors	567	100	567
Tank monitor	4,945	90(1)	4,451
Labor & materials	<u>5,438</u>	<u>100</u>	<u>5,438</u>
Total	\$18,225	97%	\$17,731

(1) The applicant's cost for a tank monitor is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 97%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$18,225 with 97% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3325.

Barbara J. Anderson:ew  
(503) 229-5870  
March 4, 1991

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Corporation  
PO Box 3002  
Corvallis, OR 97339

The applicant owns and operates a retail gas station at 1820 NE 7th, Grants Pass OR, facility no. 4465.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of cathodic protection on four steel tanks and piping, spill containment basins & automatic shutoff valves.

Claimed facility cost	\$ 13,014
(Documentation of cost was provided)	

Percent allocable to pollution control	100%
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3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed in July, 1990 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in July, 1990.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of four steel tanks and piping with leak detection, but no corrosion protection and no spill and overfill prevention.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Cathodic protection on tanks and piping.
- 2) For spill and overfill prevention - Spill containment basins & automatic shutoff valves.

The applicant reported that the soil was inspected during construction of the project and no evidence of contamination was found.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that all of the costs claimed by the applicant (\$13,014) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
Corrosion Protection:			
Cathodic protection	\$ 7,800	100%	\$ 7,800
Spill & Overfill Prevention:			
Spill containment basins	1,040	100%	1,040
Automatic shutoff valves	660	100	660
Labor & materials	<u>3,514</u>	<u>100</u>	<u>3,514</u>
Total	\$13,014	100%	\$13,014



5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$13,014 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3326.

Barbara J. Anderson:ew  
(503) 229-5870  
February 28, 1991

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Corporation  
PO Box 3002  
Corvallis, OR 97339

The applicant owns and operates a retail gas station at 1503 N. Riverside, Medford OR, facility no. 6993.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of cathodic protection on four steel tanks, fiberglass piping, spill containment basins, automatic shutoff valves and line leak detectors.

Claimed facility cost \$ 60,400  
(Accountant's certification was provided)

Percent allocable to pollution control 100%

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed in July, 1989 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in July, 1989.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of five steel tanks and piping, four of which (tanks) have leak detection, but none have corrosion protection or spill and overflow prevention.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Fiberglass piping & cathodic protection.
- 2) For spill and overflow prevention - Spill containment basins & automatic shutoff valves.
- 3) For leak detection - Line leak detectors.

The applicant reported that the soil was inspected during construction of the project and no evidence of contamination was found.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that all of the costs claimed by the applicant (\$60,400) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
<b>Corrosion Protection:</b>			
Cathodic protection	\$ 6,750	100%	\$ 6,750
Fiberglass piping	1,359	26%(1)	353
<b>Spill &amp; Overfill Prevention:</b>			
Spill containment basins	727	100	727
Automatic shutoff valve	313	100	313
<b>Leak Detection:</b>			
Line leak detectors	776	100	776
Labor & materials	<u>50,475</u>	<u>100</u>	<u>50,475</u>
Total	\$60,400	98%	\$59,394

(1) The Department has determined the percent allocable on the cost of a corrosion protected piping system by using a formula based on the difference in cost between the protected system and an equivalent steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected piping system cost is \$1,359 and the steel system is \$1,009, the resulting portion of the eligible piping cost allocable to pollution control is 26%.

##### 5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 98%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$60,400 with 98% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3327.

Barbara J. Anderson:ew  
(503) 229-5870  
February 22, 1991

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Corporation  
PO Box 3002  
Corvallis, OR 97339

The applicant owns and operates a retail gas station at 4315 S. 6th Street, Klamath Falls OR, facility no. 6994.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of epoxy lining in and cathodic protection around three tanks and spill containment basins on five tanks.

Claimed facility cost \$ 33,020  
(Accountant's certification was provided)

Percent allocable to pollution control 100%

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed in August, 1990 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in August, 1990.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of three steel and two fiberglass tanks and fiberglass piping. All tanks had leak detection, but three tanks did not have corrosion protection and none had spill and overflow prevention.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Epoxy tank lining and cathodic protection.
- 2) For spill and overflow prevention - Spill containment basins.

The applicant reported that the soil was inspected during construction of the project and no evidence of contamination was found.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that all of the costs claimed by the applicant (\$33,020) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.



The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	Eligible Facility Cost	Percent Allocable	Amount Allocable
Corrosion protection:			
Cathodic protection	\$ 6,300	100%	\$ 6,300
Epoxy tank lining	19,715	100	19,715
Spill & Overfill Prevention:			
Spill containment basins	<u>7,005</u>	<u>100</u>	<u>7,005</u>
Total	\$33,020	100%	\$33,020

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.

- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$33,020 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3329.

Barbara J. Anderson:ew  
(503) 229-5870  
March 1, 1991

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Corporation  
PO Box 3002  
Corvallis, OR 97339

The applicant owns and operates a retail gas station at 1005 Madras Hwy., Prineville OR, facility no. 6999.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of fiberglass piping, spill containment basins, automatic shutoff valves, line leak detectors and cathodic protection on three tanks.

Claimed facility cost	\$ 44,186
(Accountant's certification was provided)	

Percent allocable to pollution control	100%
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3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed in October, 1989 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in October, 1989.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of three steel tanks and piping with no corrosion protection and no spill and overflow prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Fiberglass piping & cathodic protection.
- 2) For spill and overflow prevention - Spill containment basins & automatic shutoff valves.
- 3) For leak detection - Line leak detectors.

The applicant reported that the soil was inspected during construction of the project and no evidence of contamination was found.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that the eligible facility cost for the project is \$42,551. This represents a difference of \$1,635 from the applicant's claimed cost of \$44,186 due to a determination by the Department that the cost of installing submersible pumps (\$1,635) is not eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
<b>Corrosion Protection:</b>			
Fiberglass piping	\$ 377	39%(1)	\$ 147
Cathodic protection	7,951	100	7,951
<b>Spill &amp; Overfill Prevention:</b>			
Spill containment basins	780	100	780
Automatic shutoff valves	480	100	480
<b>Leak Detection:</b>			
Line leak detectors	502	100	502
Labor & materials	<u>32,461</u>	<u>100</u>	<u>32,461</u>
Total	\$42,551	99%	\$42,321

(1) The Department has determined the percent allocable on the cost of a corrosion protected piping system by using a formula based on the difference in cost between the protected system and an equivalent steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected piping system cost is \$377 and the steel system is \$230, the resulting portion of the eligible piping cost allocable to pollution control is 39%.

#### 5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 99%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$42,551 with 99% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3330.

Barbara J. Anderson:ew  
(503) 229-5870  
March 1, 1991

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Corporation  
PO Box 3002  
Corvallis, OR 97339

The applicant owns and operates a retail gas station at 615 W. Hwy. 20, Toledo OR, facility no. 6992.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of fiberglass piping, spill containment basins, automatic shutoff valves and line leak detectors.

Claimed facility cost (Documentation of cost was provided)	\$ 16,258
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Percent allocable to pollution control	100%
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3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed in March, 1990 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in March, 1990.



4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of three lined steel tanks with partial (i.e., one product line) fiberglass piping . The remaining piping was steel with no corrosion protection. The facility had no spill and overflow prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Fiberglass piping.
- 2) For spill and overflow prevention - Spill containment basins & automatic shutoff valves.
- 3) For leak detection - Line leak detectors.

The applicant reported that the soil was inspected during construction of the project and no evidence of contamination was found.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that the eligible facility cost for the project is \$14,268. This represents a difference of \$1,990 from the applicant's claimed cost of \$16,258 due to a determination by the Department that the cost of dispensers (\$1,990) is not eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
Corrosion Protection:			
Fiberglass piping	\$ 471	39%(1)	\$ 184
Spill & Overflow Prevention:			
Spill containment basins	480	100	480
Automatic shutoff valves	780	100	780
Leak Detection:			
Line leak detectors	776	100	776
Labor & materials	<u>11,761</u>	<u>100</u>	<u>11,761</u>
Total	\$14,268	98%	\$13,981

(1) The Department has determined the percent allocable on the cost of a corrosion protected piping system by using a formula based on the difference in cost between the protected system and an equivalent steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$471 and the steel system is \$287, the resulting portion of the eligible piping cost allocable to pollution control is 39%.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 98%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$14,268 with 98% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3332.

Barbara J. Anderson:ew  
(503) 229-5870  
March 1, 1991

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Corporation  
PO Box 3002  
Corvallis, OR 97339

The applicant owns and operates a retail gas station at 1780 N. Sherman, North Bend OR, facility no. 6935.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of cathodic protection on five steel tanks and piping.

Claimed facility cost	\$ 6,300
(Documentation of cost was provided)	

Percent allocable to pollution control	100%
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3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed in March, 1989 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in March, 1989.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of five steel tanks and piping with no corrosion protection and no spill and overflow prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Cathodic protection.

The applicant reported that the soil was inspected during construction of the project and no evidence of contamination was found.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that all of the costs claimed by the applicant (\$6,300) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur, as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
Corrosion protection: Cathodic protection	<u>\$ 6,300</u>	<u>100</u>	<u>\$ 6,300</u>
Total	\$ 6,300	100%	\$ 6,300

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$6,300 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3333.

Application No. TC-3333  
Page 4

Barbara J. Anderson:ew  
(503) 229-5870  
February 27, 1991



State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Corporation  
PO Box 3002  
Corvallis, OR 97339

The applicant owns and operates a retail gas station at 3410 Old Salem Rd., Albany OR, facility no. 3202.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of cathodic protection on one steel tank and piping system, spill containment basin and an automatic shutoff valve.

Claimed facility cost (Documentation of cost was provided)	\$ 6,640
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Percent allocable to pollution control	100%
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3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed in August, 1990 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in August, 1990.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of one steel tank and piping with no corrosion protection and no spill and overflow prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Cathodic protection.
- 2) For spill and overflow prevention - Spill containment basin and an automatic shutoff valve.

The applicant reported that the soil was inspected during construction of the project and no evidence of contamination was found.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that all of the costs claimed by the applicant (\$6,640) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
Corrosion Protection:			
Cathodic protection	\$ 4,999	100%	\$ 4,999
Spill & Overfill Prevention:			
Spill containment basins	165	100	165
Automatic shutoff valve	260	100	260
Labor & materials	<u>1,216</u>	<u>100</u>	<u>1,216</u>
Total	\$ 6,640	100%	\$ 6,640

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$6,640 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3334.

Barbara J. Anderson:ew  
(503) 229-5870  
February 22, 1991

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Corporation  
PO Box 3002  
Corvallis, OR 97339

The applicant owns and operates a retail gas station at 496 Central, Coquille OR, facility no. 6943.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of cathodic protection on three tanks, spill containment basins & automatic shutoff valves.

Claimed facility cost \$ 9,577  
(Documentation of cost was provided)

Percent allocable to pollution control 100%

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed in July, 1990 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in July, 1990.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of three steel tanks and piping with no corrosion protection and no spill and overflow prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Cathodic protection.
- 2) For spill and overflow prevention - Spill containment basins & automatic shutoff valves.

The applicant reported that the soil was inspected during construction of the project and no evidence of contamination was found.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that all of the costs claimed by the applicant (\$9,577) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
Corrosion Protection:			
Cathodic protection	\$ 6,200	100%	\$ 6,200
Spill & Overfill Prevention:			
Spill containment basins	495	100	495
Automatic shutoff valve	780	100	780
Labor & materials	<u>2,102</u>	<u>100</u>	<u>2,102</u>
Total	\$ 9,577	100%	\$ 9,577

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$9,577 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3335.

Barbara J. Anderson:ew  
(503) 229-5870  
March 1, 1991



State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Corporation  
PO Box 3002  
Corvallis, OR 97339

The applicant owns and operates a retail gas station at 2219 N Hwy. 101, Lincoln City OR, facility no. 6989.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of cathodic protection on three tank and piping systems.

Claimed facility cost (Documentation of cost was provided)	\$ 5,600
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Percent allocable to pollution control	100%
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3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed in March, 1989 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in March, 1989.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of one fiberglass coated steel tank and two bare steel tanks, all with steel piping with no corrosion protection. None of the tanks have spill and overflow prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Cathodic protection on three tank and piping systems.

The applicant reported that the soil was inspected during construction of the project and no evidence of contamination was found.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that all of the costs claimed by the applicant (\$5,600) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
Corrosion protection: Cathodic protection	<u>\$ 5,600</u>	<u>100</u>	<u>\$ 5,600</u>
Total	<u>\$ 5,600</u>	<u>100%</u>	<u>\$ 5,600</u>

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.

- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$5,600 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3336.

Barbara J. Anderson:ew  
(503) 229-5870  
February 28, 1991

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Corporation  
PO Box 3002  
Corvallis, OR 97339

The applicant owns and operates a retail gas station at 4653 S. 6th, Klamath Falls OR, facility no. 6995.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of cathodic protection on four steel tanks.

Claimed facility cost (Documentation of cost was provided)	\$ 6,000
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Percent allocable to pollution control	100%
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3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed in March, 1989 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in March, 1989.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of four non-corrosion protected steel tanks and fiberglass piping and no spill and overflow prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Cathodic protection.

The applicant reported that the soil was inspected during construction of the project and no evidence of contamination was found.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that all of the costs claimed by the applicant (\$6,000) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
Corrosion protection: Cathodic protection	<u>\$ 6,000</u>	<u>100</u>	<u>\$ 6,000</u>
Total	\$ 6,000	100%	\$ 6,000

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.

- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$6,000 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3337.

Barbara J. Anderson:ew  
(503) 229-5870  
March 1, 1991



State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Corporation  
PO Box 3002  
Corvallis, OR 97339

The applicant owns and operates a retail gas station at 565 NE Stephens, Roseburg OR, facility no. 4450.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of cathodic protection on three tanks and piping, spill containment basins and automatic shutoff valves.

Claimed facility cost (Documentation of cost was provided)	\$ 9,467
Percent allocable to pollution control	100%

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed in April, 1989 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in April, 1989.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of three steel tanks and piping with leak detection, but no corrosion protection or spill and overflow prevention.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Cathodic protection.
- 2) For spill and overflow prevention - Spill containment basins & automatic shutoff valves.

The applicant reported that the soil was inspected during construction of the project and no evidence of contamination was found.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that all of the costs claimed by the applicant (\$9,467) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
<b>Corrosion Protection:</b>			
Cathodic protection	\$ 6,000	100%	\$ 6,000
<b>Spill &amp; Overfill Prevention:</b>			
Spill containment basins	495	100	495
Automatic shutoff valve	780	100	780
Labor & materials	<u>2,192</u>	<u>100</u>	<u>2,192</u>
Total	\$ 9,467	100%	\$ 9,467

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$9,467 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3338.

Barbara J. Anderson:ew  
(503) 229-5870  
February 25, 1991

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Corporation  
PO Box 3002  
Corvallis, OR 97339

The applicant owns and operates a retail gas station at 951 Park St., Lebanon OR, facility no. 4421.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of three automatic shutoff valves.

Claimed facility cost	\$ 1,201
(Documentation of cost was provided)	

Percent allocable to pollution control	100%
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3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed in October, 1990 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in October, 1990.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of three fiberglass tanks and galvanized steel piping with leak detection and spill and overflow prevention.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For spill and overflow prevention - Automatic shutoff valves.

The applicant reported that the soil was inspected during construction of the project and no evidence of contamination was found.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that all of the costs claimed by the applicant (\$1,201) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
Spill & Overfill Protection			
Automatic shutoff valves	<u>\$ 1,201</u>	<u>100%</u>	<u>\$1,201</u>
Total	\$ 1,201	100%	\$ 1,201

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.

- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$1,201 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3340.

Barbara J. Anderson:ew  
(503) 229-5870  
February 25, 1991



State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Corporation  
PO Box 3002  
Corvallis, OR 97339

The applicant owns and operates a retail gas station at 2684 S. Santiam Hwy., Lebanon OR, facility no. 4414.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of cathodic protection on four steel tanks and piping.

Claimed facility cost (Documentation of cost was provided)	\$ 6,200
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Percent allocable to pollution control	100%
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3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed in March, 1989 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in March, 1989.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of four lined steel tanks and steel piping with leak detection and spill and overflow prevention, but no external corrosion protection.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Cathodic protection

The applicant reported that the soil was inspected during construction of the project and no evidence of contamination was found.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that all of the costs claimed by the applicant (\$6,200) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
Corrosion Protection Cathodic protection	<u>\$ 6,200</u>	<u>100%</u>	<u>\$ 6,200</u>
Total	\$ 6,200	100%	\$ 6,200

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.

- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$6,200 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3341.

Barbara J. Anderson:ew  
(503) 229-5870  
February 25, 1991

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Corporation  
PO Box 3002  
Corvallis, OR 97339

The applicant owns and operates a retail gas station at 3333 Lancaster, NE, Salem OR, facility no. 4424.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of spill containment basins on three underground storage tanks.

Claimed facility cost (Documentation of cost was provided)	\$ 3,532
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Percent allocable to pollution control	100%
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3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed in November, 1990 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in November, 1990.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of three epoxy lined tanks and fiberglass piping with leak detection equipment, but no spill and overfill prevention.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For spill and overfill prevention - Spill containment basins.

The applicant reported that the soil was inspected during construction of the project and no evidence of contamination was found.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that all of the costs claimed by the applicant (\$3,532) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
Spill & Overfill Prevention:			
Spill containment basins	\$ 495	100	\$ 495
Labor & materials	<u>3,037</u>	<u>100</u>	<u>3,037</u>
Total	\$ 3,532	100%	\$ 3,532

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.

- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$3,532 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3342.

Barbara J. Anderson:ew  
(503) 229-5870  
February 22, 1991



State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Corporation  
PO Box 3002  
Corvallis, OR 97339

The applicant owns and operates a retail gas station at 820 NW Kings Blvd., Corvallis OR, facility no. 7837.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of fiberglass piping for three tank systems and tank lining in one tank.

Claimed facility cost (Documentation of cost was provided)	\$ 7,800
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Percent allocable to pollution control	100%
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3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed in October, 1989 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in October, 1989.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of steel tanks and piping with no corrosion protection and no spill and overflow prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Fiberglass piping and epoxy tank lining.

The applicant reported that the soil was inspected during construction of the project and no evidence of contamination was found.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that all of the costs claimed by the applicant (\$7,800) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	Eligible Facility Cost	Percent Allocable	Amount Allocable
Corrosion Protection:			
Fiberglass piping	\$ 108	39%(1)	\$ 42
Tank lining	4,915	100	4,915
Labor & materials	<u>2,777</u>	<u>100</u>	<u>2,777</u>
Total	\$ 7,800	99%	\$ 7,734

- (1) The Department has determined the percent allocable on the cost of a corrosion protected piping system by using a formula based on the difference in cost between the protected piping system and an equivalent steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$108 and the steel system is \$66, the resulting portion of the eligible piping cost allocable to pollution control is 39%.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 99%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$7,800 with 99% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3343.

Barbara J. Anderson:ew  
(503) 229-5870  
February 25, 1991

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Corporation  
PO Box 3002  
Corvallis, OR 97339

The applicant owns and operates a retail gas station at 304 NE 3rd, Bend OR, facility no. 6908.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of cathodic protection on three steel tanks.

Claimed facility cost (Documentation of cost was provided)	\$ 9,387
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Percent allocable to pollution control	100%
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3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed in March, 1989 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in March, 1989.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of one corrosion protected steel tank with leak detection and three steel tanks with no corrosion protection or leak detection. All four tanks have spill and overflow prevention.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Cathodic protection.

The applicant reported that the soil was inspected during construction of the project and no evidence of contamination was found.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that all of the costs claimed by the applicant (\$9,387) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	Eligible Facility Cost	Percent Allocable	Amount Allocable
Corrosion protection:			
Cathodic protection	\$ 9,387	100	\$ 9,387
Total	\$ 9,387	100%	\$ 9,387

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.

- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$9,387 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3344.

Barbara J. Anderson:ew  
(503) 229-5870  
March 1, 1991



State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Corporation  
PO Box 3002  
Corvallis, OR 97339

The applicant owns and operates a retail gas station at 1220 SE Hwy. 97, Bend OR, facility no. 6911.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of cathodic protection on three steel tanks and piping.

Claimed facility cost \$ 9,387  
(Documentation of cost was provided)

Percent allocable to pollution control 100%

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed in March, 1989 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in March, 1989.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of three steel tanks and piping with no corrosion protection and no spill and overflow prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Cathodic protection on tanks and piping.

The applicant reported that the soil was inspected during construction of the project and no evidence of contamination was found.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that all of the costs claimed by the applicant (\$9,387) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
Corrosion protection: Cathodic protection	<u>\$ 9,387</u>	<u>100</u>	<u>\$ 9,387</u>
Total	\$ 9,387	100%	\$ 9,387

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$9,387 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3345.

Barbara J. Anderson:ew  
(503) 229-5870  
February 27, 1991

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Corporation  
PO Box 3002  
Corvallis, OR 97339

The applicant owns and operates a retail gas station at 311 NE Greenwood., Bend OR, facility no. 6910.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of cathodic protection on four steel tanks.

Claimed facility cost (Documentation of cost was provided)	\$ 9,387
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Percent allocable to pollution control	100%
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3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed in March, 1989 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in March, 1989.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of four steel tanks and piping with no corrosion protection and no spill and overflow prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Cathodic protection.

The applicant reported that the soil was inspected during construction of the project and no evidence of contamination was found.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that all of the costs claimed by the applicant (\$9,387) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
Corrosion protection:			
Cathodic protection	<u>\$ 9,387</u>	<u>100</u>	<u>\$ 9,387</u>
Total	\$ 9,387	100%	\$ 9,387

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.

- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
  - c. The facility complies with DEQ statutes and rules.
  - d. The portion of the facility cost that is properly allocable to pollution control is 100%.
6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$9,387 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3346.

Barbara J. Anderson:ew  
(503) 229-5870  
February 27, 1991



State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Corporation  
PO Box 3002  
Corvallis, OR 97339

The applicant owns and operates a retail gas station at 313 N. Coast Hwy., Newport OR, facility no. 7038.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of spill containment basins, automatic shutoff valves and line leak detectors.

Claimed facility cost (Documentation of cost was provided)	\$ 10,271
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Percent allocable to pollution control	100%
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3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed in May, 1989 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in May, 1989.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of four steel tanks and piping with no corrosion protection and no spill and overfill prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For spill and overfill prevention - Spill containment basins & automatic shutoff valves on three tank systems.
- 2) For leak detection - Line leak detectors on three tank systems.

The applicant reported that the soil was inspected during construction of the project and no evidence of contamination was found.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that the eligible facility cost for the project is \$9,767. This represents a difference of \$504 from the applicant's claimed cost of \$10,271 due to a determination by the Department that the cost of tank disposal (\$300) and installation of submersible pumps and dispensers (\$204) is not eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	Eligible Facility Cost	Percent Allocable	Amount Allocable
Spill & Overfill Prevention:			
Spill containment basins	\$ 495	100%	\$ 495
Automatic shutoff valve	780	100	780
Leak Detection:			
Line leak detectors	570	100	570
Labor & materials	<u>7,922</u>	<u>100</u>	<u>7,922</u>
Total	\$ 9,767	100%	\$ 9,767

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$9,767 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3347.

Barbara J. Anderson:ew  
(503) 229-5870  
February 27, 1991

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Corporation  
PO Box 3002  
Corvallis, OR 97339

The applicant owns and operates a retail gas station at 785 Hwy. 101, Bandon OR, facility no. 6931.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of cathodic protection, fiberglass piping, spill containment basins, automatic shutoff valves and line leak detectors, monitoring wells, and Stage I vapor recovery.

Claimed facility cost	\$ 13,672
(Documentation of cost was provided)	

Percent allocable to pollution control	100%
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3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed in April, 1990 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in April, 1990.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of four corrosion protected steel tanks (three without external protection) and non-protected piping with no spill and overflow prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Cathodic protection on three tanks and fiberglass piping.
- 2) For spill and overflow prevention - Spill containment basins & automatic shutoff valves.
- 3) For leak detection - Line leak detectors & monitoring wells.

The applicant also installed Stage I vapor recovery equipment.

The applicant reported that the soil was inspected during construction of the project and no evidence of contamination was found.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that the eligible facility cost for the project is \$11,770. This represents a difference of \$1,902 from the applicant's claimed cost of \$13,672 due to a determination by the Department that the cost of installing a submersible pump (\$1,902) is not eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	Eligible Facility Cost	Percent Allocable	Amount Allocable
<b>Corrosion Protection:</b>			
Fiberglass piping	\$ 2,018	39%(1)	\$ 787
Cathodic protection	900	100	900
<b>Spill &amp; Overfill Prevention:</b>			
Spill containment basins	480	100	480
Automatic shutoff valves	780	100	780
<b>Leak Detection:</b>			
Line leak detectors	950	100	950
Monitoring wells	355	100	355
Labor & materials (includes vapor recovery)	<u>6,287</u>	<u>100</u>	<u>6,287</u>
Total	\$11,770	90%	\$10,539

(1) The Department has determined the percent allocable on the cost of a corrosion protected piping system by using a formula based on the difference in cost between the protected system and an equivalent steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected piping system cost is \$2,018 and the steel system is \$1,230, the resulting portion of the eligible piping cost allocable to pollution control is 39%.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 90%.



6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$11,770 with 90% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3348.

Barbara J. Anderson:ew  
(503) 229-5870  
February 27, 1991

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Corporation  
PO Box 3002  
Corvallis, OR 97339

The applicant owns and operates a retail gas station at 424 SW Arrow (Hwy. 101), Waldport OR, facility no. 6985.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of epoxy lining and cathodic protection on three steel tanks, fiberglass piping, spill containment basins, automatic shutoff valves and line leak detectors.

Claimed facility cost \$ 45,978  
(Accountant's certification was provided)

Percent allocable to pollution control 100%

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed in May, 1990 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in May, 1990.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of five steel tanks and piping with no corrosion protection and no spill and overflow prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Epoxy tank lining, fiberglass piping & cathodic protection.
- 2) For spill and overflow prevention - Spill containment basins & automatic shutoff valves.
- 3) For leak detection - Line leak detectors.

The applicant reported that the soil was inspected during construction of the project and no evidence of contamination was found.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that the eligible facility cost for the project is \$44,678. This represents a difference of \$1,300 from the applicant's claimed cost of \$45,978 due to a determination by the Department that the cost of tank disposal (\$300) and pumps (\$1,000) is not eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
<b>Corrosion Protection:</b>			
Fiberglass piping	\$ 1,345	39%(1)	\$ 525
Cathodic protection	5,300	100	5,300
Epoxy tank lining	19,000	100	19,000
<b>Spill &amp; Overfill Prevention:</b>			
Spill containment basins	780	100	780
Automatic shutoff valves	480	100	480
<b>Leak Detection:</b>			
Line leak detectors	582	100	582
Labor & materials	<u>17,191</u>	<u>100</u>	<u>17,191</u>
Total	\$44,678	98%	\$43,858

(1) The Department has determined the percent allocable on the cost of a corrosion protected piping system by using a formula based on the difference in cost between the protected system and an equivalent steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected piping system cost is \$1,345 and the steel system is \$820, the resulting portion of the eligible piping cost allocable to pollution control is 39%.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 98%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$44,678 with 98% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3349.

Barbara J. Anderson:ew  
(503) 229-5870  
February 28, 1991

State of Oregon  
Department of Agriculture

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Donald W. Fisher, President  
Strome-Fisher Farms, Inc.  
PO Box 368  
Junction City, Oregon 97448

The applicant owns and operates a grass seed farm operation in Junction City, Oregon.

Application was made for tax credit for an air pollution control facility.

2. Description of Claimed Facility

The facility described in this application is a 180' x 64' x 22' pole construction, metal clad, straw storage shed located at 93735 Strome Lane, Junction City, Oregon. The building is owned by the applicant.

Claimed facility cost: \$65,803  
(Accountant's Certification was provided.)

3. Description of farm operation plan to reduce open field burning.

The applicants have 500 acres of perennial varieties under grass seed cultivation. A progressive reduction in open field burning over the last three years was documented by the applicants.

Previously the applicants had constructed a 100' x 60' shed for storage of straw from approximately 130 acres. The construction of this shed will accommodate straw storage from approximately 250 acres. With the combined storage capacity the applicants did not open field burn any acreage in 1990. Further, stack burning weather damaged bales was reduced from 600 tons in 1988 to 80 tons in 1990.

4. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16. The facility has met all statutory deadlines in that:

Construction of the facility was substantially completed on June 6, 1990, and the application for final certification was found to be

complete on February 26, 1991. The application was submitted within two years of substantial completion of the facility.

5. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to reduce a substantial quantity of air pollution.

This reduction is accomplished by reduction of air contaminants, defined in ORS 468.275; by reducing the maximum acreage to be open burned in the Willamette Valley as required in OAR 340-26-013; and, the facility's qualification as a "pollution control facility", defined in OAR 340-16-025(2)(f)(A): "Equipment, facilities, and land for gathering, densifying, processing, handling, storing, transporting and incorporating grass straw or straw based products which will result in reduction of open field burning."

- b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

1. The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The facility promotes the conversion of a waste product (straw) into a salable commodity by providing protection from the weather for baled straw from approximately 250 acres of harvested perennial grass seed.

2. The estimated annual percent return on the investment in the facility.

The actual cost of the claimed facility (\$65,803) divided by the average annual cash flow (\$2607) equals a return on investment factor of 25.24. Using Table 1 of OAR 340-16-030 for a life of 20 years, the annual percent return on investment is 0%. Using the annual percent return of 0% and the reference annual percent return of 18.3%, 100% is allocable to pollution control.

3. The alternative methods, equipment and costs for achieving the same pollution control objective.

The method chosen is an accepted method for reduction of air pollution. The method is one of the least costly, most effective methods of reducing air pollution.



4. Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

There is an average annual increase in operating costs of \$1,554 to annually maintain and operate the facility. These costs were considered in the return on investment calculation.

5. Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air pollution.

There are no other factors to consider in establishing the actual cost of the facility properly allocable to prevention, control or reduction of air pollution.

The actual cost of the facility properly allocable to pollution control as determined by using these factors is 100%.

6. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the principal purpose of the facility is to reduce a substantial quantity of air pollution and accomplishes this purpose by the reduction of air contaminants, as defined in ORS 468.275.
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility that is properly allocable to pollution control is 100%.

7. Reviewer's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$65,803, with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application Number TC-3355.

Jim Britton, Manager  
Smoke Management Program  
Natural Resources Division  
Oregon Department of Agriculture  
(503) 378-6792

JB:bmtc3355  
March 20, 1991

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Rogue Valley Oil Company, Inc.  
PO Box 1328  
Medford, OR 97501

The applicant owns and operates a service station at 705 Stewart Ave., Medford OR, facility no. 5241.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of four STI-P3 tanks and fiberglass piping, spill containment basins, tank monitor, turbine leak detectors, overflow alarm and monitoring wells.

Claimed facility cost \$ 51,686  
(Accountant's certification was provided)

Percent allocable to pollution control 100%

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed on October 11, 1989 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation on October 12, 1989.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of four bare steel tanks and piping with no corrosion protection and no spill and overflow prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - STI-P3 tanks and fiberglass piping.
- 2) For spill and overflow prevention - Spill containment basins and overflow alarm.
- 3) For leak detection - Tank monitor, turbine leak detectors and monitoring wells.

The applicant reported that soil testing was performed at the time of tank removal and contamination was found. The site is involved in a cleanup under DEQ supervision.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that all of the costs claimed by the applicant (\$51,686) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
<b>Corrosion Protection:</b>			
STI-P3 tanks & fiber-glass piping	\$13,728	33%(1)	\$ 4,530
<b>Spill &amp; Overfill Prevention:</b>			
Spill containment basins	782	100	782
Overfill alarm	175	100	175
<b>Leak Detection:</b>			
Tank monitor	6,364	90 (2)	5,728
Turbine leak detectors	756	100	756
Monitoring wells	581	100	581
Labor & materials	<u>29,300</u>	<u>100</u>	<u>29,300</u>
<b>Total</b>	<b>\$51,686</b>	<b>81%</b>	<b>\$41,852</b>

- (1) The Department has determined the percent allocable on the cost of a corrosion protected tank and piping system by using a formula based on the difference in cost between the protected tank and piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$13,728 and the bare steel system is \$9,219, the resulting portion of the eligible tank and piping cost allocable to pollution control is 33%.
- (2) The applicant's cost for a tank monitor is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.

- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 81%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$51,686 with 81% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3357.

Barbara J. Anderson:ew  
(503) 229-5870  
February 19, 1991

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Rogue Valley Oil Company, Inc.  
PO Box 1328  
Medford, OR 97501

The applicant owns and operates a service station at 2501 Crater Lake Hwy., Medford OR, facility no. 4602.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of four fiberglass tanks and piping, spill containment basins, tank monitor, turbine leak detectors, overflow alarm and monitoring wells.

Claimed facility cost \$56,778  
(Accountant's certification was provided)

Percent allocable to pollution control 100%

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed on December 12, 1989 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation on December 12, 1989.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of three bare steel tanks and piping with no corrosion protection and no spill and overflow prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Fiberglass tanks and piping.
- 2) For spill and overflow prevention - Spill containment basins and overflow alarm.
- 3) For leak detection - Tank monitor, turbine leak detectors and monitoring wells.

The applicant reported that soil testing was performed at the time of tank removal and some contamination was found.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that all of the costs claimed by the applicant (\$56,778) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:



- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
Corrosion Protection:			
Fiberglass tank & piping	\$20,752	50%(1)	\$10,376
Spill & Overfill Prevention:			
Spill containment basin	761	100	761
Overfill alarm	175	100	175
Leak Detection:			
Tank monitor	6,364	90 (2)	5,728
Turbine leak detectors	624	100	624
Monitoring wells	222	100	222
Labor & materials	<u>27,880</u>	<u>100</u>	<u>27,880</u>
Total	\$56,778	81%	\$45,766

- (1) The Department has determined the percent allocable on the cost of a corrosion protected tank and piping system by using a formula based on the difference in cost between the protected tank system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected tank system cost is \$20,752 and the bare steel system is \$10,420, the resulting portion of the eligible tank and piping cost allocable to pollution control is 50%.
- (2) The applicant's cost for a tank monitor is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.

- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 81%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$56,778 with 81% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3358.

Barbara J. Anderson:ew  
(503) 229-5870  
February 20, 1991

State of Oregon  
Department of Environmental Quality

**TAX RELIEF APPLICATION REVIEW REPORT**

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1. Applicant

Willamette Industries, Inc.  
Structural Wood Products Division  
1300 S.W. Fifth Avenue  
3800 First Interstate Tower  
Portland, Oregon 97201

The applicant owns and operates a wood "I" beam (truss) manufacturing facility at 2550 Progress Way in Woodburn, Oregon.

Application was made for tax credit for an air pollution control facility.

2. Description of Facility

The claimed facility is a Western Pneumatic Bagfilter, Model 460, with 8:1 air-to-cloth ratio which controls particulate emissions from two cyclones.

Claimed Facility Cost: \$49,682.00  
(Accountant's Certification was provided).

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed and placed in operation on March 30, 1990 and the application for final certification was found to be complete on February 21, 1991 within 2 years of substantial completion of the facility.

4. Evaluation of Application

a. The facility is eligible because the sole purpose of the facility is to control a substantial quantity of air pollution. This control is accomplished by elimination of air contaminants as defined in ORS 468.275.

b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

This is not a solid waste, hazardous waste, or used oil recycling or resource recovery facility and therefore this factor is not applicable.

- 2) The estimated annual percent return on the investment in the facility.

Average annual cash flow is less than zero. This results from the estimated operating expenses for the first five years of \$60,100 less the gross annual income for the first five years of approximately \$625 (value of recovered material). Therefore, by using the return on investment formula, 100% of the facility cost would be allocable to pollution control.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The Department knows of no other reasonable alternative.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The company estimates an annual average savings from recovering the wood particles of up to a maximum of \$125.00. This results from an annual maximum of 5 tons a year recovered at an approximate value of \$25 a ton. The cost of maintaining and operating the facility averages \$12,020 over the first 5 years. These costs have been considered in calculating the annual return on investment.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or to recycling or properly disposing of used oil.

There are no other factors to consider in establishing the actual cost of the facility properly allocable to prevention, control or reduction of pollution.

The actual cost of the facility properly allocable to pollution control as determined by using these factors is 100%.

##### 5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.

- b. The facility is eligible for final tax credit certification in that the sole purpose of the facility is to control a substantial quantity of air pollution and accomplishes this purpose by the elimination of air contaminants as defined in ORS 468.275.
- c. The facility complies with permit conditions.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$49,682 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC - 3360.

John J. Ruscigno:ds  
PO\AH12086  
(503) 229-6480  
(2/25/91)

State of Oregon  
Department of Agriculture

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Garold H. Leppin  
24620 SE Old Bethel Road  
Amity, Oregon 97101

The applicant owns and operates a grass seed farm operation in Amity, Oregon.

Application was made for tax credit for an air pollution control facility.

2. Description of Claimed Facility

The facility described in this application is a 104' x 96' x 30' pole construction straw storage shed and a 1986 New Holland 1075 balewagon located at 24620 SE Old Bethel Road, Amity, Oregon. The land and buildings are owned by the applicant.

Straw storage shed	\$12,759
New Holland balewagon	\$40,000

Claimed facility cost: \$52,759  
(Accountant's Certification was provided.)

3. Description of farm operation plan to reduce open field burning.

The applicant has 120 acres of annual ryegrass under grass seed cultivation. The applicant claims that prior to purchasing equipment and constructing the straw storage shed, after harvesting the grass seed all straw was open burned in the field. Applicant claims that an additional 480 acres of grass seed straw was open field burned before he began custom baling them for other growers.

The applicant's practice now is to bale behind the combine, pick up bales into 8' square blocks with the balewagon and deliver blocks to the storage shed loading them into the shed with a Hyster squeeze fork. The bales are stored until winter markets open up. The applicant then trucks the straw to feed lots and barns for livestock feed use in parts of Oregon, Idaho, Washington, and British Columbia.

#### 4. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16. The facility has met all statutory deadlines in that:

Construction of the facility was substantially completed on September 25, 1990, and the application for final certification was found to be complete on February 26, 1991. The application was submitted within two years of substantial completion of the facility.

#### 5. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to reduce a substantial quantity of air pollution.

This reduction is accomplished by reduction of air contaminants, defined in ORS 468.275; by reducing the maximum acreage to be open burned in the Willamette Valley as required in OAR 340-26-013; and, the facility's qualification as a "pollution control facility", defined in OAR 340-16-025(2)(f)(A): "Equipment, facilities, and land for gathering, densifying, processing, handling, storing, transporting and incorporating grass straw or straw based products which will result in reduction of open field burning."

- b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

1. The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The facility promotes the conversion of a waste product (straw) into a salable commodity by providing protection from the weather until markets are available.

2. The estimated annual percent return on the investment in the facility.

The actual cost of the claimed facility (\$52,759) divided by the average annual cash flow derived from the sale of the straw (\$3,360) equals a return on investment factor of 15.7. Using Table 1 of OAR 340-16-030 for a life of 15 years, the annual percent return on investment is 0%. Using the annual percent return of 0% and the reference annual percent return of 18.3%, 100% is allocable to pollution control.



3. The alternative methods, equipment and costs for achieving the same pollution control objective.

The method chosen is an accepted method for reduction of air pollution. The method is one of the least costly, most effective methods of reducing air pollution.

4. Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

There is an average annual increase in operating costs of \$35,840 to annually maintain and operate the facility. These costs were considered in the return on investment calculation.

5. Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air pollution.

There are no other factors to consider in establishing the actual cost of the facility properly allocable to prevention, control or reduction of air pollution.

The actual cost of the facility properly allocable to pollution control as determined by using these factors is 100%.

6. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the principal purpose of the facility is to reduce a substantial quantity of air pollution and accomplishes this purpose by the reduction of air contaminants, as defined in ORS 468.275.
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility that is properly allocable to pollution control is 100%.

7. Reviewer's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$52,759, with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application Number TC-3362.

Jim Britton, Manager  
Smoke Management Program  
Natural Resources Division  
Oregon Department of Agriculture  
(503) 378-6792

JB:bmTC3362  
March 20, 1991

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Ridenour Oil Co., Inc.  
PO Box 430  
Philomath, OR 97370

The applicant owns and operates a gas station/cardlock/  
convenience store/heating oil distributorship at 1841 Main  
Street, Philomath OR, facility no. 5264.

Application was made for a tax credit for a water pollution  
control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this  
application are the installation of four STI-P3 double wall  
tanks and fiberglass piping, spill containment basins, tank  
monitor, line leak detectors, monitoring wells, automatic  
shutoff valves, piping for Stage II vapor recovery and an  
oil/water separator.

Claimed facility cost (Accountant's certification was provided)	\$155,562
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Percent allocable to pollution control	100%
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3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and  
by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that  
installation of the facility was substantially completed  
on July 30, 1990 and the application for certification  
was found to be complete within two years of substantial  
completion of the facility. The facility was placed  
into operation May 7, 1990.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of eleven steel tanks and piping with no corrosion protection and no spill and overflow prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - STI-P3 double wall tanks and fiberglass piping.
- 2) For spill and overflow prevention - Spill containment basins and automatic shutoff valves.
- 3) For leak detection - Tank monitor, line leak detectors and monitoring wells.

The applicant also installed piping for Stage II vapor recovery and an oil/water separator.

The applicant reported that soil testing was performed at the time of tank removal and some contamination was found and removed.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that the eligible facility cost for the project is \$147,516. This represents a difference of \$8,046 from the applicant's claimed cost of \$155,562 due to a determination by the Department that the cost of decommissioning additional tanks (\$8,046) is not eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant considered the method chosen to be the best available. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
<b>Corrosion Protection:</b>			
STI-P3 double wall tanks & fiberglass piping	\$45,201	64%(1)	\$28,929
<b>Spill &amp; Overfill Prevention:</b>			
Spill containment basins	699	100	699
Automatic shutoff valves & vapor recovery	4,272	100	4,272
<b>Leak Detection:</b>			
Tank monitor	5,060	90 (2)	4,554
Line leak detectors	2,000	100	2,000
Monitoring wells	480	100	480
Labor & materials (includes oil/water separator)	<u>89,804</u>	<u>100</u>	<u>89,804</u>
<b>Total</b>	<b>\$147,516</b>	<b>89%</b>	<b>\$130,738</b>

- (1) The Department has determined the percent allocable on the cost of a corrosion protected tank and piping system by using a formula based on the difference in cost between the protected tank and piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$45,201 and the bare steel system is \$16,301, the resulting portion of the eligible tank and piping cost allocable to pollution control is 64%.
- (2) The applicant's cost for a tank monitor is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.

- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 89%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$147,516 with 89% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3363.

Barbara J. Anderson:ew  
(503) 229-5870  
February 25, 1991

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Ridenour Oil Co., Inc.  
PO Box 430  
Philomath, OR 97370

The applicant owns and operates a gas station at 480 SW 4th, Corvallis OR, facility no. 8177.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of four STI-P3 double wall tanks and fiberglass piping, spill containment basins, tank monitor, line leak detectors, monitoring wells, automatic shutoff valves, piping for Stage II vapor recovery and an overflow alarm.

Claimed facility cost	\$ 77,429
(Accountant's certification was provided)	

Percent allocable to pollution control	100%
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3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed on July 27, 1990 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation July 30, 1990.



4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of five steel tanks and piping containing motor fuel and one containing used oil with no corrosion protection and no spill and overflow prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - STI-P3 double wall tanks and fiberglass piping.
- 2) For spill and overflow prevention - Spill containment basins, automatic shutoff valves and overflow alarm.
- 3) For leak detection - Tank monitor, line leak detectors and monitoring wells.

The applicant also installed piping for Stage II vapor recovery.

The applicant reported that soil testing was performed at the time of tank removal and some contamination was found and removed.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that the eligible facility cost for the project is \$76,739. This represents a difference of \$690 from the applicant's claimed cost of \$77,429 due to a determination by the Department that the cost of tank disposal (\$1,200) is not eligible pursuant to the definition of a pollution control facility in ORS 468.155 and the cost of line leak detectors (\$510) which was inadvertently omitted by the applicant is eligible and should have been included.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant considered the method chosen to be the best available. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
<b>Corrosion Protection:</b>			
STI-P3 double wall tanks & fiberglass piping	\$30,643	66%(1)	\$20,224
<b>Spill &amp; Overfill Prevention:</b>			
Spill containment basins	836	100	836
Automatic shutoff valves	682	100	682
Overfill alarm	110	100	110
<b>Leak Detection:</b>			
Tank monitor	4,662	90 (2)	4,196
Line leak detectors	510	100	510
Monitoring wells	512	100	512
Labor & materials	<u>38,784</u>	<u>100</u>	<u>38,784</u>
Total	\$76,739	86%	\$65,854

- (1) The Department has determined the percent allocable on the cost of a corrosion protected tank and piping system by using a formula based on the difference in cost between the protected tank and piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$30,643 and the bare steel system is \$10,288, the resulting portion of the eligible tank and piping cost allocable to pollution control is 66%.
- (2) The applicant's cost for a tank monitor is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

## 5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.

- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 86%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$76,739 with 86% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3364.

Barbara J. Anderson:ew  
(503) 229-5870  
February 25, 1991

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Polk County Farmers Co-op  
PO Box 47  
Rickreall, OR 97371

The applicant owns and operates a service station at 5082 Dallas/Salem Hwy., Salem OR, facility no. 7664.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of five double wall fiberglass tanks and piping, spill containment basins, tank monitor, monitoring wells, automatic shutoff valves and line leak detectors.

Claimed facility cost	\$233,384
(Accountant's certification was provided)	

Percent allocable to pollution control	100%
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3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed in October, 1990 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in September, 1990.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of five steel tanks and cathodically protected steel piping with no corrosion protection and no spill and overflow prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Double wall fiberglass tanks & piping.
- 2) For spill and overflow prevention - Spill containment basins & automatic shutoff valves.
- 3) For leak detection - Tank monitor, line leak detectors & monitoring wells.

The applicant reported that soil testing was performed at the time of tank removal and contamination was found. Cleanup is in progress.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that all of the costs claimed by the applicant (\$233,384) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant considered the method chosen to be the most cost effective. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
Corrosion Protection:			
Double wall fiberglass tanks & piping	\$ 82,943	50%(1)	\$ 41,472
Spill & Overfill Prevention:			
Spill containment basins	1,566	100	1,566
Automatic shutoff valves	1,434	100	1,434
Leak Detection:			
Tank monitor	8,534	90 (2)	7,681
Line leak detectors	5,592	100	5,592
Monitoring wells (including installation)	500	100	500
Labor & materials	<u>132,815</u>	<u>100</u>	<u>132,815</u>
Total	\$233,384	82%	\$191,060

(1) The Department has determined the percent allocable on the cost of a corrosion protected tank and piping system by using a formula based on the difference in cost between the protected tank and piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$82,943 and the bare steel system is \$41,170, the resulting portion of the eligible tank and piping cost allocable to pollution control is 50%.

(2) The applicant's cost for a tank monitor is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

## 5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.



- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 82%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$233,384 with 82% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3366.

Barbara J. Anderson:ew  
(503) 229-5870  
March 4, 1991

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Pratum Co-op Warehouse, Inc.  
8955 Sunnyview Rd., NE  
Salem, OR 97305

The applicant owns and operates a cardlock station at 8833 Silverton Rd., NE, Silverton OR, facility no. 263.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of three fiberglass tanks and double wall fiberglass piping, spill containment basins, tank monitor, monitoring wells, oil/water separator, automatic shutoff valves and a bottom loader.

Claimed facility cost \$ 74,761  
(Accountant's certification was provided)

Percent allocable to pollution control 50%

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed in June, 1989 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in June, 1989.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of two steel tanks and piping with no corrosion protection and no spill and overflow prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Three fiberglass tanks & double wall fiberglass piping.
- 2) For spill and overflow prevention - Spill containment basins & automatic shutoff valves.
- 3) For leak detection - Tank monitor & monitoring wells.

The applicant also installed an oil/water separator and a bottom loader.

The applicant reported that soil testing was performed at the time of tank removal and no contamination was found.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that the eligible facility cost for the project is \$70,689. This represents a difference of \$4,072 from the applicant's claimed cost of \$74,761 due to a determination by the Department that the cost of the bottom loader (\$5,524) is not eligible pursuant to the definition of a pollution control facility in ORS 468.155 because it is not required by law and does not meet the definition of sole purpose and that the cost of automatic shutoff valves and miscellaneous parts (\$1,452) is eligible and should be added.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The applicant estimated that 50% of the claimed facility cost is allocable to pollution control. The applicant arrived at this estimate by (1) subtracting the cost of steel tanks from the total equipment cost figure and dividing the difference by the total claimed project cost, (2) multiplying the labor cost by the resulting percentage, and (3) adding together the net equipment and net labor costs and dividing by the total claimed project cost.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
Corrosion Protection:			
Fiberglass tanks & piping	\$15,491	37%(1)	\$ 5,732
Spill & Overfill Prevention:			
Spill containment basins	528	100	528
Automatic shutoff valves	1,058	100	1,058
Leak Detection:			
Tank monitor	6,439	90 (2)	5,795
Monitoring wells	252	100	252
Oil/water separator	1,589	100	1,589
Labor & materials	<u>45,332</u>	<u>100</u>	<u>45,332</u>
Total	\$70,689	85%	\$60,286

- (1) The Department has determined the percent allocable on the cost of a corrosion protected tank and piping system by using a formula based on the difference in cost between the protected tank and piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$15,491 and the bare steel system is \$9,755, the resulting portion of the eligible tank and piping cost allocable to pollution control is 37%.

- (2) The applicant's cost for a tank monitor is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 85%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$70,689 with 85% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3367.

Barbara J. Anderson:ew  
(503) 229-5870  
March 4, 1991

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Cliff & Wanda Bauer  
Roadrunner Gas & Grocery  
PO Box 605  
Scappoose, OR 97056

The applicant owns and operates a gas station/grocery store at 52023 Columbia River Hwy., Scappoose OR, facility no. 9092.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of an automatic tank monitoring system.

Claimed facility cost (Documentation of cost was provided)	\$ 7,232
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Percent allocable to pollution control	100%
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3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed on July 1, 1990 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation on July 1, 1990.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of three STI-P3 tanks and fiberglass piping with spill and overflow prevention and turbine leak detectors.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For leak detection - Automatic tank monitor system.

The applicant reported that the soil was inspected during construction of the project and no evidence of contamination was found.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that all of the costs claimed by the applicant (\$7,232) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.



- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
Leak Detection:			
Tank monitor	\$ 5,682	90%(1)	\$ 5,114
Labor & materials	<u>1,550</u>	<u>100</u>	<u>1,550</u>
Total	\$ 7,232	92%	\$ 6,664

- (1) The applicant's cost for a tank monitor is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 92%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$7,232 with 92% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3368.

Barbara J. Anderson:ew  
(503) 229-5870  
February 28, 1991

State of Oregon  
Department of Agriculture

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Smith Bros. Farms  
30736 Peoria Road  
Shedd, Oregon 97377

The applicant owns and operates a grass seed farm operation in Shedd, Oregon.

Application was made for tax credit for air pollution control equipment.

2. Description of Claimed Facility

The equipment described in this application is a used John Deere 8640, 225 hp tractor, located at 30736 Peoria Road, Shedd, Oregon. The equipment is owned by the applicant.

Claimed equipment cost: \$28,371.11  
(Accountant's Certification was provided.)

3. Description of farm operation plan to reduce open field burning.

The applicants have 2,746 perennial acres and 454 annual acres under grass seed cultivation. The applicants have documented a progressive reduction in open field burning over the past several years turning towards baling off and plowing under annual acreage and increased tillage of perennial acreage because of shorter stand life (5 yrs to 3 yrs) due to less open burning.

The applicants state that reduced open burning creates a demand for additional equipment to accomplish the increased tillage required. The applicants have reduced open field burning by approximately 300 acres and project future reductions.

4. Procedural Requirements

The equipment is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16. The equipment has met all statutory deadlines in that:

Purchase of the equipment was substantially completed on October 27, 1990, and the application for final certification was found to be complete on February 28, 1991. The application was submitted within two years of substantial purchase of the equipment.

5. Evaluation of Application

- a. The equipment is eligible because the principal purpose of the facility is to reduce a substantial quantity of air pollution.

This reduction is accomplished by reduction of air contaminants, defined in ORS 468.275; by reducing the maximum acreage to be open burned in the Willamette Valley as required in OAR 340-26-013; and, the facility's qualification as a "pollution control facility", defined in OAR 340-16-025(2)(f)(A): "Equipment, facilities, and land for gathering, densifying, processing, handling, storing, transporting and incorporating grass straw or straw based products which will result in reduction of open field burning."

- b. Eligible Cost Findings

In determining the percent of the pollution control equipment cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

1. The extent to which the equipment is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity. The equipment enables the applicants to increase tillage operations in lieu of open field burning.

2. The estimated annual percent return on the investment in the equipment.

There is no annual percent return on the investment as applicant claims no gross annual income.

3. The alternative methods, equipment and costs for achieving the same pollution control objective.

The method chosen is an accepted method for reduction of air pollution. The method is one of the least costly, most effective methods of reducing air pollution.

4. Any related savings or increase in costs which occur or may occur as a result of the purchase of the equipment.

There is an increase in annual operating costs of \$13,000 to annually maintain and operate the equipment. These costs were considered in the return on investment calculation.

5. Any other factors which are relevant in establishing the portion of the actual cost of the equipment properly allocable to the prevention, control or reduction of air pollution.

The established average annual operating hours for tractors is set at 450 hours. To obtain a total percent allocable the annual operating hours per implement used in reducing acreage open field burned is as follows:

Annual Acreage		Machinery	Annual
<u>Implement</u>	<u>Acres</u> <u>Worked</u>	<u>Capacity</u> <u>Acre/Hours</u>	<u>Operating Hours</u>
Plow	400	7	57
Harrow	1200 (400x3)	7	171
Roller	400	7	<u>57</u>
Sub-Total annual operating hours			285
Perennial Acreage			
Disc	266 (133x2)	7	38
Plow	133	7	19
Harrow	532 (133x4)	7	76
Roller	266 (133x2)	7	<u>38</u>
Sub-Total annual operating hours			171
Total Annual operating hours			456

The total annual operating hours (456) exceed the average annual operating hours (450).

The actual cost of the equipment properly allocable to pollution control as determined by using these factors is 100%.

#### 6. Summation

- a. The equipment was purchased in accordance with all regulatory deadlines.
- b. The equipment is eligible for final tax credit certification in that the principal purpose of the facility is to reduce a substantial quantity of air pollution and accomplishes this purpose by the reduction of air contaminants, as defined in ORS 468.275.
- c. The equipment complies with DEQ statutes and rules.
- d. The portion of the equipment that is properly allocable to pollution control is 100%.

7. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$28,371.11, with 100% allocated to pollution control, be issued for the equipment claimed in Tax Credit Application Number TC-3369.

Jim Britton, Manager  
Smoke Management Program  
Natural Resources Division  
Oregon Department of Agriculture  
(503) 378-6792

JB:bmTC3369  
March 20, 1991

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Rolland S. Piatt  
5341 SE 99th Ave.  
Portland, OR 97266

The applicant owns and operates a gasoline service station at 4525 SE 28th Ave., Portland OR, facility no. 3256.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of double wall fiberglass piping, tank monitor, spill containment basins, turbine leak detectors, overflow alarm, automatic shutoff valves and Stage I and II vapor recovery equipment and piping.

Claimed facility cost \$ 28,634  
(Accountant's certification was provided)

Percent allocable to pollution control 100%

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed in October, 1989 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in October, 1989.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of four cathodically protected steel tanks and non-protected steel piping and no spill and overflow prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Fiberglass piping.
- 2) For spill and overflow prevention - Spill containment basins, overflow alarm & automatic shutoff valves.
- 3) For leak detection - Tank monitor & turbine leak detectors.

The applicant also installed Stage I & II vapor recovery equipment & piping.

The applicant reported that the soil was inspected during construction of the project and no evidence of contamination was found.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that the eligible facility cost for the project is \$29,834. This represents a difference of \$1,200 from the applicant's claimed cost of \$28,634 due to a determination by the Department that the total cost of the fiberglass piping should have been reflected in the claimed project cost and also that an error occurred in the calculation of the claimed project cost.



b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant considered the method chosen to be the only alternative. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
<b>Corrosion Protection:</b>			
Double wall fiberglass piping	\$ 4,086	85%(1)	\$ 3,473
<b>Spill &amp; Overfill Prevention:</b>			
Spill containment basins	3,900	100 (3)	3,900
Overfill alarm	1,800	100 (3)	1,800
Automatic shutoff valves	1,800	100	1,800
<b>Leak Detection:</b>			
Tank monitor	4,500	90 (2)	4,050
Turbine leak detectors	300	100	300
Stage II vapor recovery	1,650	100 (3)	1,650
Labor & materials (includes Stage I vapor recovery)	<u>11,798</u>	<u>100</u>	<u>11,798</u>
<b>Total</b>	<b>\$29,834</b>	<b>96%</b>	<b>\$28,771</b>

- (1) The Department has determined the percent allocable on the cost of a corrosion protected piping system by using a formula based on the difference in cost between the protected system and an equivalent steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected piping system cost is \$4,086 and the steel system is \$600, the resulting portion of the eligible piping cost allocable to pollution control is 85%.
- (2) The applicant's cost for a tank monitor is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.
- (3) Includes labor.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.

- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 96%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$29,834 with 96% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3370.

Barbara J. Anderson:ew  
(503) 229-5870  
March 12, 1991

State of Oregon  
Department of Agriculture

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Ernest Glaser Farms  
29245 Seven Mile Lane  
Shedd, Oregon 97377

The applicant owns and operates a grass seed farm operation in Shedd, Oregon.

Application was made for tax credit for air pollution control equipment.

2. Description of Claimed Facility

The equipment described in this application is a custom modified 60B Hesston Stakhand, located at 29245 Seven Mile Lane, Shedd, Oregon. The equipment is owned by the applicant.

Claimed equipment cost: \$55,739  
(Accountant's Certification was provided.)

3. Description of farm operation plan to reduce open field burning.

The applicant's family farm has 1,500 perennial and 500 annual acres under grass seed cultivation. Open field burning was the primary field sanitation method used prior to any straw removal program.

The applicant's alternative program is based on bulk straw removal by a custom baler. The applicant followed baling with propane flaming but received mixed results too dependent on a variety of conditions. The applicant discovered that the material left on the ground after baling interfered with an effective chemical program.

The claimed equipment is a vacuum used to remove chaff, seeds and re-clipped straw left on the soil surface after harvest and baling. The Rear's modifications enable the equipment to clip, sweep, and vacuum the fields providing better field sanitation than other tried alternatives.

4. Procedural Requirements

The equipment is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16. The equipment has met all statutory deadlines in that:

Purchase of the equipment was substantially completed on September 26, 1990, and the application for final certification was found to be complete on March 5, 1991. The application was submitted within two years of substantial purchase of the equipment.

5. Evaluation of Application

- a. The equipment is eligible because the principal purpose of the facility is to reduce a substantial quantity of air pollution.

This reduction is accomplished by reduction of air contaminants, defined in ORS 468.275; by reducing the maximum acreage to be open burned in the Willamette Valley as required in OAR 340-26-013; and, the facility's qualification as a "pollution control facility", defined in OAR 340-16-025(2)(f)(A): "Equipment, facilities, and land for gathering, densifying, processing, handling, storing, transporting and incorporating grass straw or straw based products which will result in reduction of open field burning."

- b. Eligible Cost Findings

In determining the percent of the pollution control equipment cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

1. The extent to which the equipment is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity. The material collected by the equipment is disposed of by stack burning.

2. The estimated annual percent return on the investment in the equipment.

There is no annual percent return on the investment as applicant claims no gross annual income.

3. The alternative methods, equipment and costs for achieving the same pollution control objective.

The method chosen is an accepted method for reduction of air pollution. The method is one of the least costly, most effective methods of reducing air pollution.

4. Any related savings or increase in costs which occur or may occur as a result of the purchase of the equipment.

There is an increase in operating costs of \$9,400.00 to annually maintain and operate the equipment. These costs were considered in the return on investment calculation.

5. Any other factors which are relevant in establishing the portion of the actual cost of the equipment properly allocable to the prevention, control or reduction of air pollution.

There are no other factors to consider in establishing the actual cost of the equipment properly allocable to prevention, control or reduction of air pollution.

The actual cost of the equipment properly allocable to pollution control as determined by using these factors is 100%.

6. Summation

- a. The equipment was purchased in accordance with all regulatory deadlines.
- b. The equipment is eligible for final tax credit certification in that the principal purpose of the facility is to reduce a substantial quantity of air pollution and accomplishes this purpose by the reduction of air contaminants, as defined in ORS 468.275.
- c. The equipment complies with DEQ statutes and rules.
- d. The portion of the equipment that is properly allocable to pollution control is 100%.

7. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$55,739, with 100% allocated to pollution control, be issued for the equipment claimed in Tax Credit Application Number TC-3372.

Jim Britton, Manager  
Smoke Management Program  
Natural Resources Division  
Oregon Department of Agriculture  
(503) 378-6792

JB:bmTC3372  
March 20, 1991

State of Oregon  
Department of Agriculture

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Brian Glaser  
29245 Seven Mile Lane  
Shedd, Oregon 97377

The applicant owns and operates a grass seed farm operation in Shedd, Oregon.

Application was made for tax credit for air pollution control equipment.

2. Description of Claimed Facility

The equipment described in this application is a John Deere 4955, 200 hp tractor, located at 29245 Seven Mile Lane, Shedd, Oregon. The equipment is owned by the applicant.

Claimed equipment cost: \$88,000  
(Accountant's Certification was provided.)

3. Description of farm operation plan to reduce open field burning.

The applicant's family farm has 1,500 perennial and 500 annual acres under grass seed cultivation. Open field burning was the primary field sanitation method used prior to any straw removal program.

The applicant's alternative program is based on bulk straw removal by a custom baler on perennial fields. In the absence of open field burning the applicants found that they needed to rotate the grass stands more often. When changing from an old stand to a new stand the applicants fine chop the straw remaining after baling then disc and plow it into the soil. On stands carried over from year to year the applicant clips, sweeps, and vacuums the fields providing better field sanitation than other tried alternatives.

Annuals are being treated by fine chopping the straw and discing and plowing it into the soil.

The applicant states that the 200 hp tractor is needed to handle the additional work load and provide adequate power for the heavy disc and meet the horse power requirements of the Hesston (Rear's modified) Straw/Grassvac.

4. Procedural Requirements

The equipment is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16. The equipment has met all statutory deadlines in that:

Purchase of the equipment was substantially completed on February 18, 1991, and the application for final certification was found to be complete on March 5, 1991. The application was submitted within two years of substantial purchase of the equipment.

5. Evaluation of Application

- a. The equipment is eligible because the principal purpose of the facility is to reduce a substantial quantity of air pollution.

This reduction is accomplished by reduction of air contaminants, defined in ORS 468.275; by reducing the maximum acreage to be open burned in the Willamette Valley as required in OAR 340-26-013; and, the facility's qualification as a "pollution control facility", defined in OAR 340-16-025(2)(f)(A): "Equipment, facilities, and land for gathering, densifying, processing, handling, storing, transporting and incorporating grass straw or straw based products which will result in reduction of open field burning."

- b. Eligible Cost Findings

In determining the percent of the pollution control equipment cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

1. The extent to which the equipment is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity. The material collected by the Straw/Grassvac is disposed of by stack burning. The disc is used to turn fine chopped straw back into the soil.

2. The estimated annual percent return on the investment in the equipment.

There is no annual percent return on the investment as applicant claims no gross annual income.

3. The alternative methods, equipment and costs for achieving the same pollution control objective.



The method chosen is an accepted method for reduction of air pollution. The method is one of the least costly, most effective methods of reducing air pollution.

4. Any related savings or increase in costs which occur or may occur as a result of the purchase of the equipment.

There is an increase in operating costs of \$22,957.70 to annually maintain and operate the equipment. These costs were considered in the return on investment calculation.

5. Any other factors which are relevant in establishing the portion of the actual cost of the equipment properly allocable to the prevention, control or reduction of air pollution.

The established average annual operating hours for tractors is set at 450 hours. To obtain a total percent allocable, the annual operating hours per implement used in reducing acreage open field burned is as follows:

<u>Perennial</u>		<u>Machinery</u>	<u>Annual</u>
<u>Implement</u>	<u>Acres Worked</u>	<u>Capacity</u>	<u>Operating</u>
		<u>Acre/Hour</u>	<u>Hours</u>
Straw/Grassvac	1900 (950x2)	5	380
Heavy Disc	270 (135x2)	7	<u>39</u>
Sub-Total annual operating hours			419
 <u>Annual</u>			
Heavy Disc	300 (150x2)	7	<u>43</u>
Sub-Total annual operating hours			43
Total annual operating hours			462

The total annual operating hours of 462 exceeds the average annual operating hours of 450.

The actual cost of the equipment properly allocable to pollution control as determined by using these factors is 100%.

6. Summation

- a. The equipment was purchased in accordance with all regulatory deadlines.
- b. The equipment is eligible for final tax credit certification in that the principal purpose of the facility is to reduce a substantial quantity of air pollution and accomplishes this purpose by the reduction of air contaminants, as defined in ORS 468.275.

- c. The equipment complies with DEQ statutes and rules.
- d. The portion of the equipment that is properly allocable to pollution control is 100%.

7. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$88,000, with 100% allocated to pollution control, be issued for the equipment claimed in Tax Credit Application Number TC-3373.

Jim Britton, Manager  
Smoke Management Program  
Natural Resources Division  
Oregon Department of Agriculture  
(503) 378-6792

JB:bmTC3373  
March 20, 1991

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Grange Cooperative Supply Association  
PO Box 3637  
Central Point, OR 97502

The applicant owns and operates a cardlock station at 421 A Street, Ashland OR, facility no. 4747.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of a tank monitor system and an overflow alarm.

Claimed facility cost (Documentation of cost was provided)	\$ 13,518
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Percent allocable to pollution control	100%
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3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed in January, 1991 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in January, 1991.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of four steel tanks and piping with no corrosion protection and no spill and overflow prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For spill and overflow prevention - An overflow alarm.
- 2) For leak detection - Tank monitor.

The applicant reported that the soil was inspected during construction of the project and no evidence of contamination was found.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that all of the costs claimed by the applicant (\$13,518) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant did not indicate that any alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	Eligible Facility Cost	Percent Allocable	Amount Allocable
Spill & Overfill Prevention:			
Overfill alarm	\$ 173	100%	\$ 173
Leak Detection:			
Tank monitor	6,334	90 (1)	5,701
Labor & materials	<u>7,011</u>	<u>100</u>	<u>7,011</u>
Total	\$13,518	95%	\$12,885

- (1) The applicant's cost for a tank monitor is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.

- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 95%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$13,518 with 95% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3374.

Barbara J. Anderson:ew  
(503) 229-5870  
March 12, 1991

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Grange Cooperative Supply Association  
PO Box 3637  
Central Point, OR 97502

The applicant owns and operates a cardlock station at 2531 S. Pacific Hwy., Medford OR, facility no. 4751.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of a tank monitor system.

Claimed facility cost	\$ 11,121
(Documentation of cost was provided)	

Percent allocable to pollution control	100%
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3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed in June, 1989 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in June, 1989.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of three steel tanks and piping with no corrosion protection and no spill and overflow prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For leak detection - Tank monitor.

The applicant reported that the soil was inspected during construction of the project and no evidence of contamination was found.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that all of the costs claimed by the applicant (\$11,121) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant did not indicate that any alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.



- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
Leak Detection: Tank monitor	\$ 5,362	90%(1)	\$ 4,826
Labor & materials	<u>5,759</u>	<u>100</u>	<u>5,759</u>
Total	\$11,121	95%	\$10,585

- (1) The applicant's cost for a tank monitor is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.

- d. The portion of the facility cost that is properly allocable to pollution control is 95%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$11,121 with 95% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3375.

Barbara J. Anderson:ew  
(503) 229-5870  
March 12, 1991

State of Oregon  
Department of Environmental Quality  
TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

James D. Ellison  
PO Box 636  
Roseburg, OR 97470

The applicant owns and operates a contract Bus service at 215 SE Houck, Roseburg OR, facility no. 9573.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of epoxy lining in four steel tanks and spill containment basins.

Claimed facility cost \$ 31,853  
(Accountant's certification was provided)

Percent allocable to pollution control 100%

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed in August, 1989 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in August, 1989.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of four steel tanks and piping with no corrosion protection and no spill and overflow prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Epoxy tank lining.
- 2) For spill and overflow prevention - Spill containment basins.

The applicant reported that the soil was inspected during construction of the project and no evidence of contamination was found.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that all of the costs claimed by the applicant (\$31,853) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
Corrosion Protection:			
Epoxy tank lining	\$27,953	100%	\$27,953
Spill & Overfill Prevention:			
Spill containment basins	<u>3,900</u>	<u>100</u>	<u>3,900</u>
Total	\$31,853	100%	\$31,853

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$31,853 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3376.

Barbara J. Anderson:ew  
(503) 229-5870  
March 12, 1991

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Barry Desbiens, Inc.  
202 SE 181st, #206  
Portland, OR 97233

The applicant owns and operates a service station/convenience store at 16150 SE Stark, Portland OR, facility no. 5886.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of three fiberglass tanks and fiberglass piping, spill containment basins, tank monitor, line leak detectors, float vent valves, overflow alarm, monitoring wells and Stage II vapor recovery piping.

Claimed facility cost \$ 62,171  
(Accountant's certification was provided)

Percent allocable to pollution control 100%

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed in May, 1990 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in May, 1990.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of three steel tanks and piping with no corrosion protection and no spill and overflow prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Fiberglass tanks and piping.
- 2) For spill and overflow prevention - Spill containment basins, float vent valves and overflow alarm.
- 3) For leak detection - Tank monitor, line leak detectors and monitoring wells.

The applicant also installed Stage II vapor recovery piping in anticipation of that requirement.

The applicant reported that soil testing was performed at the time of tank removal and no contamination was found.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that the eligible facility cost for the project is \$72,201. This represents a difference of \$10,030 from the applicant's claimed cost of \$62,171 due to a determination by the Department that the cost of the project should reflect the total cost of the tanks rather than the difference between bare steel and fiberglass tanks.



b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	Eligible Facility Cost	Percent Allocable	Amount Allocable
Corrosion Protection:			
Fiberglass tanks & pipe	\$22,535	44%(1)	\$ 9,915
Spill & Overfill Prevention:			
Spill containment basins	832	100	832
Float vent valves	735	100	735
Overfill alarm	110	100	110
Leak Detection:			
Tank monitor	5,621	90 (2)	5,059
Line leak detectors	510	100	510
Monitoring wells	258	100	258
Stage II vapor recovery	582	100	582
Labor & material	<u>41,018</u>	<u>100</u>	<u>41,018</u>
Total	\$72,201	82%	\$59,019

- (1) The Department has determined the percent allocable on the cost of a corrosion protected tank and piping system by using a formula based on the difference in cost between the protected tank and piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$22,535 and the bare steel system is \$12,720, the resulting portion of the eligible tank and piping cost allocable to pollution control is 44%.
- (2) The applicant's cost for a tank monitor is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.

- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 82%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$72,201 with 82% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3377.

Barbara J. Anderson:ew  
(503) 229-5870  
March 12, 1991

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

L. P. Busch, Inc.  
2624 Pacific Ave.  
Forest Grove, OR 97116

The applicant leases and operates a retail service station at 7200 SW Beaverton-Hillsdale Hwy., Portland OR, facility no. 10537.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of three STI-P3 tanks and fiberglass piping, spill containment basins, Tank monitor, line leak detectors, float vent valves, monitoring wells, sumps and Stage I & II vapor recovery.

Claimed facility cost	\$ 66,680
(Accountant's certification was provided)	

Percent allocable to pollution control	100%
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3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed in November, 1990 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in November, 1990.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of four steel tanks and piping with no corrosion protection and no spill and overflow prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - STI-P3 tanks & fiberglass piping.
- 2) For spill and overflow prevention - Spill containment basins, float vent valves & sumps.
- 3) For leak detection - Tank monitor, line leak detectors & monitoring wells.

The applicant also installed Stage I & II vapor recovery.

The applicant reported that some contamination was found at the site and cleanup is in progress.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that all of the costs claimed by the applicant (\$66,680) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
<b>Corrosion Protection:</b>			
STI-P3 tanks & fiberglass piping	\$15,338	41%(1)	\$ 6,289
<b>Spill &amp; Overfill Prevention:</b>			
Spill containment basins	588	100	588
Float vent valves	143	100	143
Sumps	1,485	100	1,485
<b>Leak Detection:</b>			
Tank monitor	5,682	90(2)	5,114
Line leak detectors	567	100	567
Monitoring wells	254	100	254
Stage I vapor recovery	476	100	476
Labor & materials(includes Stage II vapor recovery)	<u>42,147</u>	<u>100</u>	<u>42,147</u>
<b>Total</b>	<b>\$66,680</b>	<b>86%</b>	<b>\$57,063</b>

- (1) The Department has determined the percent allocable on the cost of a corrosion protected piping system by using a formula based on the difference in cost between the protected system and an equivalent steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected piping system cost is \$15,338 and the steel system is \$9,109, the resulting portion of the eligible piping cost allocable to pollution control is 41%.
- (2) The applicant's cost for a tank monitor is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.

- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 86%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$66,680 with 86% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3378.

Barbara J. Anderson:ew  
(503) 229-5870  
March 7, 1991



State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

L. P. Busch, Inc.  
2624 Pacific Ave.  
Forest Grove, OR 97116

The applicant owns and operates a retail service station at 9 SE 82nd Ave., Portland OR, facility no. 1921.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of three STI-P3 tanks and fiberglass piping, spill containment basins, Tank monitor, line leak detectors, float vent valves, sumps and Stage I & II vapor recovery.

Claimed facility cost	\$ 83,038
(Accountant's certification was provided)	

Percent allocable to pollution control	100%
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3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed in February, 1990 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in February, 1990.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of six steel tanks and piping with no corrosion protection and no spill and overflow prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - STI-P3 tanks & fiberglass piping.
- 2) For spill and overflow prevention - Spill containment basins, float vent valves & sumps.
- 3) For leak detection - Tank monitor & line leak detectors.

The applicant also installed Stage I & II vapor recovery.

The applicant reported that some contamination was found at the site and cleanup is in progress.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that all of the costs claimed by the applicant (\$83,038) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
<b>Corrosion Protection:</b>			
STI-P3 tanks & fiberglass piping	\$16,276	43%(1)	\$ 6,999
<b>Spill &amp; Overflow Prevention:</b>			
Spill containment basins	528	100	528
Float vent valves	103	100	103
Sumps	1,181	100	1,181
<b>Leak Detection:</b>			
Tank monitor	5,682	90(2)	5,114
Line leak detectors	567	100	567
Stage I vapor recovery	448	100	448
Labor & materials(includes Stage II vapor recovery)	<u>58,253</u>	<u>100</u>	<u>58,253</u>
<b>Total</b>	<b>\$83,038</b>	<b>88%</b>	<b>\$73,193</b>

- (1) The Department has determined the percent allocable on the cost of a corrosion protected piping system by using a formula based on the difference in cost between the protected system and an equivalent steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected piping system cost is \$16,276 and the steel system is \$9,344, the resulting portion of the eligible piping cost allocable to pollution control is 43%.
- (2) The applicant's cost for a tank monitor is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.

- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 88%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$83,038 with 88% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3379.

Barbara J. Anderson:ew  
(503) 229-5870  
March 7, 1991

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

L. P. Busch, Inc.  
2624 Pacific Ave.  
Forest Grove, OR 97116

The applicant owns and operates a retail service station at 5727 Powell Blvd., Portland OR, facility no. 1917.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of three STI-P3 tanks and fiberglass piping, spill containment basins, Tank monitor, line leak detectors, float vent valves, monitoring wells, sumps and Stage I & II vapor recovery.

Claimed facility cost	\$ 59,989
(Accountant's certification was provided)	

Percent allocable to pollution control	100%
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3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed in May, 1990 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in May, 1990.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of three steel tanks and piping with no corrosion protection and no spill and overflow prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - STI-P3 tanks & fiberglass piping.
- 2) For spill and overflow prevention - Spill containment basins, float vent valves & sumps.
- 3) For leak detection - Tank monitor, line leak detectors & monitoring wells.

The applicant also installed Stage I & II vapor recovery.

The applicant reported that some contamination was found at the site and cleanup is in progress.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that all of the costs claimed by the applicant (\$59,989) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.



	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
<b>Corrosion Protection:</b>			
STI-P3 tanks & fiberglass piping	\$13,839	36%(1)	\$ 4,982
<b>Spill &amp; Overfill Prevention:</b>			
Spill containment basins	588	100	588
Float vent valves	151	100	151
Sumps	1,485	100	1,485
<b>Leak Detection:</b>			
Tank monitor	5,682	90(2)	5,114
Line leak detectors	567	100	567
Monitoring wells	181	100	181
Stage I vapor recovery	447	100	447
Labor & materials(includes Stage II vapor recovery)	<u>37,049</u>	<u>100</u>	<u>37,049</u>
<b>Total</b>	<b>\$59,989</b>	<b>84%</b>	<b>\$50,564</b>

- (1) The Department has determined the percent allocable on the cost of a corrosion protected piping system by using a formula based on the difference in cost between the protected system and an equivalent steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected piping system cost is \$13,839 and the steel system is \$8,875, the resulting portion of the eligible piping cost allocable to pollution control is 36%.
- (2) The applicant's cost for a tank monitor is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.

- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 84%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$59,989 with 84% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3380.

Barbara J. Anderson:ew  
(503) 229-5870  
March 7, 1991

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Byrnes Oil Co., Inc.  
PO Box 700  
Pendleton, OR 97801

The applicant owns and operates a commercial fueling facility at 3rd and Current, Athena OR, facility no. 10717.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the new installation of two fiberglass tanks, fiberglass piping, spill containment basins, tank monitor, float vent valves and monitoring wells.

Claimed facility cost \$ 35,700  
(Accountant's certification was provided)

Percent allocable to pollution control 100%

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed in February, 1991 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in March, 1991.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of vacant land. Tanks had been removed several years ago.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Fiberglass tanks and piping.
- 2) For spill and overflow prevention - Spill containment basins and float vent valves.
- 3) For leak detection - Tank monitor and monitoring wells.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that the eligible facility cost for the project is \$32,200. This represents a difference of \$3,500 from the applicant's claimed cost of \$35,700 due to a determination by the Department that the cost of installing tanks and piping at a new facility is not eligible pursuant to the definition of a pollution control facility in ORS 468.155 because that cost would have been incurred regardless of pollution control.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	Eligible Facility <u>Cost</u>	Percent Allocable	Amount Allocable
Corrosion Protection:			
Fiberglass tanks & piping	\$ 7,753	39%(1)	\$ 3,024
Spill & Overfill Prevention:			
Spill containment basins	588	100	588
Leak Detection:			
Tank monitor	4,544	90 (2)	4,090
Monitoring wells	300	100	300
Labor & materials (includes float vent valves)	<u>19,015</u>	<u>100</u>	<u>19,015</u>
Total	\$32,200	84%	\$27,017

- (1) The Department has determined the percent allocable on the cost of a corrosion protected tank and piping system by using a formula based on the difference in cost between the protected tank and piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$7,753 and the bare steel system is \$4,699, the resulting portion of the eligible tank and piping cost allocable to pollution control is 39%.
- (2) The applicant's cost for a tank monitor is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 84%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$32,200 with 84% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3381.

Barbara J. Anderson:ew  
(503) 229-5870  
March 18, 1991

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Ronald H. Gustafson  
1565 NE 148th  
Portland, OR 97230

The applicant owns and operates a service station at 12920 SE Stark, Portland OR, facility no. 5057.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of three STI-P3 tanks and fiberglass piping, cathodic protection, spill containment basins, tank monitor, turbine leak detectors, float vent valves, monitoring wells and Stage I vapor recovery equipment.

Claimed facility cost \$ 49,652  
(Accountant's certification was provided)

Percent allocable to pollution control 100%

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed on June 30, 1989 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation on June 30, 1989.



4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of three steel tanks and piping with no corrosion protection and no spill and overflow prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - STI-P3 tanks, fiberglass piping & cathodic protection.
- 2) For spill and overflow prevention - Spill containment basins & float vent valves.
- 3) For leak detection - Tank monitor, turbine leak detectors & monitoring wells.

The applicant also installed Stage I vapor recovery equipment.

The applicant reported that soil testing was performed at the time of tank removal and no contamination was found.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that the all of the costs claimed by the applicant (\$49,652) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant considered the method chosen to be the most cost effective. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
<b>Corrosion Protection:</b>			
STI-P3 tanks & fiberglass piping	\$17,482	33%(1)	\$ 5,769
Cathodic Protection	550	100	550
<b>Spill &amp; Overfill Prevention:</b>			
Spill containment basins	518	100	518
Float vent valves	95	100	95
<b>Leak Detection:</b>			
Tank monitor	5,250	90 (2)	4,725
Turbine leak detectors	504	100	504
Monitoring wells	261	100	261
Stage I vapor recovery	446	100	446
Labor & materials	<u>24,546</u>	<u>100</u>	<u>24,546</u>
Total	\$49,652	75%	\$37,414

- (1) The Department has determined the percent allocable on the cost of a corrosion protected tank and piping system by using a formula based on the difference in cost between the protected system and an equivalent steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected tank and piping system cost is \$17,482 and the steel system is \$11,800, the resulting portion of the eligible tank and piping cost allocable to pollution control is 33%.
- (2) The applicant's cost for a tank monitor is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.

- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 75%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$49,652 with 75% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3382.

Barbara J. Anderson:ew  
(503) 229-5870  
March 12, 1991

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Johnson Oil Company, Inc.  
PO Box 629  
Astoria, OR 97103

The applicant owns and operates a service station at 231 Holladay and Avenue A, Seaside OR, facility no. 1162.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of epoxy lining in three steel tanks and spill containment basins.

Claimed facility cost \$ 22,665  
(Accountant's certification was provided)

Percent allocable to pollution control 100%

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed on April 23, 1990 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation on April 23, 1990.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of three steel gasoline tanks, one used oil tank and steel piping with no corrosion protection and no spill and overfill prevention or leak detection equipment. The used oil tank was removed at the time of the project and was not replaced.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Epoxy lining in three tanks.
- 2) For spill and overfill prevention - Spill containment basins.

The applicant reported that the soil was inspected during construction of the project and no evidence of contamination was found.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current..

The Department concludes all of the costs claimed by the applicant (\$22,665) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
Corrosion Protection:			
Epoxy tank lining	\$18,915	100%	\$18,915
Spill & Overfill Prevention:			
Spill containment basins	<u>3,750</u>	<u>100</u>	<u>3,750</u>
Total	\$22,665	100%	\$22,665

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$22,665 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3386.

Barbara J. Anderson:ew  
(503) 229-5870  
March 19, 1991



State of Oregon  
Department of Environmental Quality  
TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Johnson Oil Co., Inc.  
PO Box 629  
Astoria, OR 97103

The applicant owns and operates a retail and cardlock gas station and food market at Route 6, Box 272, Astoria OR, facility no. 1160.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of two STI-P3 2-compartment tanks and fiberglass piping, spill containment basins, line leak detectors, monitoring wells and automatic shutoff valves.

Claimed facility cost (Accountant's certification was provided)	\$106,432
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Percent allocable to pollution control	100%
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3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed on March 27, 1990 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation March 27, 1990.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of three steel tanks and piping with no corrosion protection and no spill and overflow prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - STI-P3 tanks and fiberglass piping.
- 2) For spill and overflow prevention - Spill containment basins and automatic shutoff valves.
- 3) For leak detection - Line leak detectors and monitoring wells.

The applicant reported that soil testing was performed at the time of tank removal and some contamination was found and removed.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that all of the costs claimed by the applicant (\$106,432) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

The applicant considered the method chosen to be the most economical. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
Corrosion Protection:			
STI-P3 tanks & fiberglass piping	\$25,656	34%(1)	\$ 8,723
Spill & Overfill Prevention:			
Spill containment basins	800	100	800
Automatic shutoff valves	498	100	498
Leak Detection:			
Line leak detectors	660	100	660
Monitoring wells	987	100	987
Labor & materials	<u>77,831</u>	<u>100</u>	<u>77,831</u>
Total	\$106,432	84%	\$ 89,499

(1) The Department has determined the percent allocable on the cost of a corrosion protected tank and piping system by using a formula based on the difference in cost between the protected tank and piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$25,656 and the bare steel system is \$17,000, the resulting portion of the eligible tank and piping cost allocable to pollution control is 34%.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 84%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$106,432 with 84% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3387.

Barbara J. Anderson:ew  
(503) 229-5870  
March 19, 1991

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Baker Valley Chevron  
1702 Main St.  
Baker City, OR 97814

The applicant owns and operates a service station at 1702 Main St., Baker City OR, facility no. 186.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of a tank monitor and spill containment basins.

Claimed facility cost (Documentation of cost was provided)	\$ 12,477
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Percent allocable to pollution control	100%
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3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed on November 30, 1990 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation on December 1, 1990.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of four steel tanks and piping with corrosion protection but no spill and overflow prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For spill and overflow prevention - Spill containment basins.
- 2) For leak detection - Tank monitor.

The applicant reported that tank tightness testing was performed and the soil was sampled prior to construction of the project. Some contamination was found. Groundwater is being monitored.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that all of the costs claimed by the applicant (\$12,477) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant indicated that no alternative methods were available. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
Spill & Overfill Prevention:			
Spill containment basins	\$ 512	100%	\$ 512
Leak Detection:			
Tank monitor	5,690	90 (1)	5,121
Labor & materials	<u>6,275</u>	<u>100</u>	<u>6,275</u>
Total	\$12,477	95%	\$11,908



- (1) The applicant's cost for a tank monitor is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 95%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$12,477 with 95% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3389.

Barbara J. Anderson:ew  
(503) 229-5870  
March 15, 1991



4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of five steel tanks and piping with no corrosion protection and no spill and overflow prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Fiberglass tank and piping.
- 2) For spill and overflow prevention - Spill containment basins, a sump and automatic shutoff valves.
- 2) For leak detection - Monitoring wells.

The applicant reported that the soil was inspected during construction of the project and no evidence of contamination was found.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that all of the costs claimed by the applicant (\$13,935) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	Eligible Facility Cost	Percent Allocable	Amount Allocable
<b>Corrosion Protection:</b>			
Fiberglass tank & piping	\$ 2,055	57%(1)	\$ 1,171
<b>Spill &amp; Overfill Prevention:</b>			
Spill containment basins	1,164	100	1,164
Automatic shutoff valves	1,324	100	1,324
Sump	385	100	385
<b>Leak Detection:</b>			
Monitoring wells	232	100	232
Labor & materials	<u>8,775</u>	<u>100</u> (2)	<u>8,775</u>
Total	\$13,935	94%	\$13,051

- (1) The Department has determined the percent allocable on the cost of a corrosion protected tank and piping system by using a formula based on the difference in cost between the protected tank system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected tank system cost is \$2,055 and the bare steel system is \$890, the resulting portion of the eligible tank and piping cost allocable to pollution control is 57%.
- (2) Does not include the cost of labor to install the added tank and piping since that cost would have occurred regardless of pollution control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.

- d. The portion of the facility cost that is properly allocable to pollution control is 94%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$13,935 with 94% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3391.

Barbara J. Anderson:ew  
(503) 229-5870  
March 15, 1991

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Delphia Oil, Inc.  
65 Portway Street  
Astoria, OR 97103

The applicant owns and operates a service station at 75754 Rockcrest Street, Rainier OR, facility no. 6319.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of spill containment basins and automatic shutoff valves.

Claimed facility cost \$ 3,113  
(Accountant's certification was provided)

Percent allocable to pollution control 100%

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed on October 12, 1990 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility operated continuously during the project.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of four steel tanks and piping with no corrosion protection and no spill and overflow prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For spill and overflow prevention - Spill containment basins and automatic shutoff valves.

The applicant reported that the soil was inspected during construction of the project and no evidence of contamination was found.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that all of the costs claimed by the applicant (\$3,113) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.



- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
Spill & Overfill Prevention:			
Spill containment basins	\$ 660	100%	\$ 660
Automatic shutoff valves	1,197	100	1,197
Labor & materials	<u>1,256</u>	<u>100</u>	<u>1,256</u>
Total	\$ 3,113	100%	\$ 3,113

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$3,113 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3392.

Barbara J. Anderson:ew  
(503) 229-5870  
March 15, 1991

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Delphia Oil, Inc.  
65 Portway Street  
Astoria, OR 97103

The applicant owns and operates a service station at Harbor and Main, Warrenton OR, facility no. 7102.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of fiberglass piping, spill containment basins, monitoring wells and automatic shutoff valves.

Claimed facility cost	\$ 7,099
(Accountant's certification was provided)	

Percent allocable to pollution control	100%
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3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed on October 24, 1990 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility operated continuously during the project.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of three steel tanks and piping with no corrosion protection and no spill and overflow prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Fiberglass piping.
- 2) For spill and overflow prevention - Spill containment basins and automatic shutoff valves.
- 2) For leak detection - Monitoring wells.

The applicant reported that the soil was inspected during construction of the project and no evidence of contamination was found.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that all of the costs claimed by the applicant (\$7,099) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
<b>Corrosion Protection:</b>			
Fiberglass piping	\$ 238	75%(1)	\$ 179
<b>Spill &amp; Overfill Prevention:</b>			
Spill containment basins	800	100	800
Automatic shutoff valves	1,063	100	1,063
<b>Leak Detection:</b>			
Monitoring wells	99	100	99
Labor & materials	<u>4,899</u>	<u>100</u>	<u>4,899</u>
Total	\$ 7,099	99%	\$ 7,040

- (1) The Department has determined the percent allocable on the cost of a corrosion protected piping system by using a formula based on the difference in cost between the protected system and an equivalent steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected piping system cost is \$238 and the steel system is \$60, the resulting portion of the eligible tank and piping cost allocable to pollution control is 75%.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 99%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$7,099 with 99% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3393.

Barbara J. Anderson:ew  
(503) 229-5870  
March 15, 1991

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Sixth Street Shell  
W. J. Wren and Wm. H. Wren  
PO Box 175  
Redmond, OR 97756

The applicant owns and operates a grocery store/gas station at 109 S. Sixth Street, Redmond OR, facility no. 6814.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of fiberglass piping, cathodic protection, spill containment basins, line leak detectors, float vent valves, monitoring wells and Stage I and II vapor recovery piping and equipment.

Claimed facility cost \$ 23,106  
(Accountant's certification was provided)

Percent allocable to pollution control 95%

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed on October 30, 1989 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation October 30, 1989.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of three steel tanks and piping with no corrosion protection and no spill and overflow prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Cathodic protection and fiberglass piping.
- 2) For spill and overflow prevention - Spill containment basins and float vent valves.
- 3) For leak detection - Line leak detectors and monitoring wells.

The applicant also installed Stage I and II vapor recovery equipment and piping.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that all of the costs claimed by the applicant (\$23,106) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:



- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The applicant estimated that 95% of the claimed facility cost of \$23,106 is allocable to pollution control. The applicant arrived at this estimate by subtracting the cost of non-corrosion protected piping.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	Eligible Facility Cost	Percent Allocable	Amount Allocable
<b>Corrosion Protection:</b>			
Fiberglass piping	\$ 1,841	38%(1)	\$ 700
Cathodic protection	1,045	100	1,045
<b>Spill &amp; Overflow Prevention:</b>			
Spill containment basins	587	100	587
Float vent valves	1,116	100	1,116
<b>Leak Detection:</b>			
Line leak detectors	510	100	510
Monitoring wells	223	100	223
Labor & materials (includes Stage I & II vapor recovery)	<u>17,784</u>	<u>100</u>	<u>17,784</u>
Total	\$23,106	95%	\$21,965

- (1) The Department has determined the percent allocable on the cost of a corrosion protected piping system by using a formula based on the difference in cost between the protected piping system and an equivalent steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$1,841 and the steel system is \$1,148, the resulting portion of the eligible piping cost allocable to pollution control is 38%.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 95%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$23,106 with 95% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3394.

Barbara J. Anderson:ew  
(503) 229-5870  
March 19, 1991

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Third Street Shell  
W. J. Wren and Wm. H. Wren  
PO Box 175  
Redmond, OR 97756

The applicant owns and operates a grocery store/gas station at 550 West Third Street, Prineville OR, facility no. 6800.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of three double wall fiberglass tanks and piping, spill containment basins, turbine leak detectors, float vent valves, monitoring wells and Stage I and II vapor recovery piping and equipment.

Claimed facility cost	\$ 93,669
(Accountant's certification was provided)	

Percent allocable to pollution control	87%
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3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed on June 30, 1990 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation June 30, 1990.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of three steel tanks and piping with no corrosion protection and no spill and overflow prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Double wall fiberglass tanks and piping.
- 2) For spill and overflow prevention - Spill containment basins and float vent valves.
- 3) For leak detection - Turbine leak detectors and monitoring wells.

The applicant also installed Stage I and II vapor recovery equipment and piping.

The applicant reported that soil testing was performed at the time of tank removal and some contamination was found. Cleanup is in progress.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that all of the costs claimed by the applicant (\$93,669) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The applicant estimated that 87% of the claimed facility cost of \$93,669 is allocable to pollution control. The applicant arrived at this estimate by subtracting the estimated costs of bare steel tanks and steel piping.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
Corrosion Protection: Double wall fiberglass tanks & piping	\$37,754	68%(1)	\$25,673
Spill & Overflow Prevention: Spill containment basins	579	100	579
Float vent valves	362	100	362
Leak Detection: Turbine leak detectors	555	100	555
Monitoring wells	342	100	342
Labor & materials (includes Stage I & II vapor recovery)	<u>54,077</u>	<u>100</u>	<u>54,077</u>
Total	\$93,669	87%	\$81,588

(1) The Department has determined the percent allocable on the cost of a corrosion protected tank and piping system by using a formula based on the difference in cost between the protected tank and piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$37,754 and the bare steel system is \$11,952, the resulting portion of the eligible tank and piping cost allocable to pollution control is 68%.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 87%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$93,669 with 87% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3395.

Barbara J. Anderson:ew  
(503) 229-5870  
March 19, 1991



State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Plum Fierce Shell  
W. J. Wren and Wm. H. Wren  
PO Box 175  
Redmond, OR 97756

The applicant owns and operates a grocery store/gas station at 612 S. Fifth Street, Redmond OR, facility no. 6810.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of three double wall fiberglass tanks and piping, spill containment basins, turbine leak detectors, float vent valves, monitoring wells and Stage I and II vapor recovery piping and equipment.

Claimed facility cost \$ 95,643  
(Accountant's certification was provided)

Percent allocable to pollution control 88%

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that installation of the facility was substantially completed on June 30, 1990 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation June 30, 1990.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of four steel tanks and piping with no corrosion protection and no spill and overflow prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Double wall fiberglass tanks and piping.
- 2) For spill and overflow prevention - Spill containment basins and float vent valves.
- 3) For leak detection - Turbine leak detectors and monitoring wells.

The applicant also installed Stage I and II vapor recovery equipment and piping.

The applicant reported that soil testing was performed at the time of tank removal and some contamination was found. Cleanup has been completed.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that all of the costs claimed by the applicant (\$95,643) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

The applicant estimated that 88% of the claimed facility cost of \$95,643 is allocable to pollution control. The applicant arrived at this estimate by subtracting the cost estimates for bare steel tanks and steel piping.

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
<b>Corrosion Protection:</b>			
Double wall fiberglass tanks & piping	\$37,754	68%(1)	\$25,673
<b>Spill &amp; Overflow Prevention:</b>			
Spill containment basins	579	100	579
Float vent valves	378	100	378
<b>Leak Detection:</b>			
Turbine leak detectors	555	100	555
Monitoring wells	325	100	325
Labor & materials (includes Stage I & II vapor recovery)	<u>56,052</u>	<u>100</u>	<u>56,052</u>
Total	\$95,643	87%	\$83,562

(1) The Department has determined the percent allocable on the cost of a corrosion protected tank and piping system by using a formula based on the difference in cost between the protected tank and piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$37,754 and the bare steel system is \$11,952, the resulting portion of the eligible tank and piping cost allocable to pollution control is 68%.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 87%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$95,643 with 87% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3396.

Barbara J. Anderson:ew  
(503) 229-5870  
March 19, 1991

REQUEST FOR EQC ACTION

Meeting Date: April 26, 1991  
Agenda Item: C  
Division: HSW  
Section: UST

**SUBJECT:**

Underground Storage Tank (UST) Omnibus Rule Changes

**PURPOSE:**

Authorize Hearing on Proposed Modifications to Underground Storage Tank Rules for Technical Standards, Financial Responsibility Requirements and Cleanup for Leaking Underground Storage Tank Systems.

**ACTION REQUESTED:**

- Work Session Discussion
  - General Program Background
  - Potential Strategy, Policy, or Rules
  - Agenda Item  for Current Meeting
  - Other: (specify)
  
- Authorize Rulemaking Hearing
- Adopt Rules
  - Proposed Rules Attachment A, B, C, D, E, F
  - Rulemaking Statements Attachment G
  - Fiscal and Economic Impact Statement Attachment G
  - Public Notice Attachment H
  - Land Use Consistency Statement Attachment I
  - Description of Rule Modification Attachment J
  
- Issue a Contested Case Order
- Approve a Stipulated Order
- Enter an Order
  - Proposed Order Attachment



811 SW Sixth Avenue  
Portland, OR 97204-1390  
(503) 229-5696



Meeting Date: April 26, 1991  
Agenda Item: C  
Page 2

<input type="checkbox"/> Approve Department Recommendation	
<input type="checkbox"/> Variance Request	Attachment <input type="checkbox"/>
<input type="checkbox"/> Exception to Rule	Attachment <input type="checkbox"/>
<input type="checkbox"/> Informational Report	Attachment <input type="checkbox"/>
<input type="checkbox"/> Other: (specify)	Attachment <input type="checkbox"/>

**DESCRIPTION OF REQUESTED ACTION:**

To obtain state approval to regulate USTs in lieu of federal regulation it is necessary for the Department of Environmental Quality (Department) to adopt technical and financial responsibility requirements that are no less stringent than the federal UST regulations, 40 CFR 280, and apply to the U.S. Environmental Protection Agency (EPA) for state program approval. The Department is currently preparing application for state approval based upon rules adopted on June 7, 1990 and July 6, 1990. The federal UST regulations have been corrected and changed since that time. These proposed rules adopt all of the corrections and some of the changes.

Several additional modifications to Oregon's UST rules are also proposed. These modifications will improve the utility and effectiveness of the rules for both the regulated community and the Department. A description of the proposed rule changes and rationale are contained in Attachment J.

The Department is requesting authorization to hold public hearings on the proposed rules shown in Attachments A, B, C, D, E, and F.

**AUTHORITY/NEED FOR ACTION:**

<input type="checkbox"/> Required by Statute: _____	Attachment <input type="checkbox"/>
Enactment Date: _____	
<input checked="" type="checkbox"/> Statutory Authority: <u>ORS 466.705 - .995</u>	Attachment <input type="checkbox"/>
<input type="checkbox"/> Pursuant to Rule: _____	Attachment <input type="checkbox"/>
<input checked="" type="checkbox"/> Pursuant to Federal Law/Rule: <u>40 CFR 280</u>	Attachment <input type="checkbox"/>
<input type="checkbox"/> Other: _____	Attachment <input type="checkbox"/>
<input checked="" type="checkbox"/> Time Constraints: (explain)	

The Department will be making application for federal authorization prior to August 1, 1991. Adoption of the proposed rule modifications relating to the federal regulations must be in place by August 1991.

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DEVELOPMENTAL BACKGROUND:

___ Advisory Committee Report/Recommendation	Attachment ___
___ Hearing Officer's Report/Recommendations	Attachment ___
___ Response to Testimony/Comments	Attachment ___
___ Prior EQC Agenda Items: (list)	Attachment ___
___ Other Related Reports/Rules/Statutes:	Attachment ___
___ Supplemental Background Information	Attachment ___

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

The underground storage tank program regulates owners and operators of USTs, persons who install, retrofit, test, and remove USTs, persons who cleanup petroleum contaminated soil at USTs and persons who cleanup petroleum contaminated soil at heating oil tanks to assure that groundwater is not contaminated from leaking USTs.

Authorization of the state UST program by EPA will allow the Department to regulate USTs in lieu of federal regulation. The proposed rule changes allow state rules to meet federal "no less stringent" requirement.

The proposed rules require Class III owners and operators (petroleum marketers with 13-99 USTs) to demonstrate financial responsibility of \$1,000,000 for cleanup and related third party damages from spills and releases from USTs by August 1, 1991, the earliest date these rules could be adopted. Federal regulations require Class III persons to demonstrate financial responsibility by April 26, 1991.

The Environmental Quality Commission (Commission) adopted financial responsibility requirement for owners and operators with 100 or more tanks on July 6, 1990. Rules covering financial responsibility requirements for Class IV owners and operators (persons who own 1-12 tanks) and Class V (local government UST owners) will be proposed for adoption after federal requirements are in place; approximately October 26, 1991 and July 1992, respectively.

The proposed rules allow the Director of the Department (Director) to waive UST permit fees where a financial hardship exists. While only one person has asked for a fee waiver, the Department believes it is appropriate to assist where financial hardship exists.



PROGRAM CONSIDERATIONS:

The proposed rules include modifications to the UST technical standards, financial responsibility requirements, UST Service Provider and Supervisor licensing, UST classification of violations, and UST petroleum cleanup sections. The modifications were initiated by changes in federal UST regulations and requests from Department staff, UST owners and operators and licensed UST Service Providers and Supervisors. A description of the proposed modifications and rationale for the modifications are contained in Attachment J.

These modifications improve the program operation for both the Department and the regulated community. Adding the financial responsibility requirements for UST owners and operators with 13-99 tanks allows the Department to apply for EPA approval of the program.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

1. Do not adopt the proposed rule modifications and continue to manage the UST program with present rules.

The proposed rule modifications improve the UST program plus add financial responsibility requirements for UST owners and operators with 13-99 tanks (Class III). It is likely that the EPA will not authorize the state program without financial responsibility requirements on Class III owners and operators. The Department presently receives federal funding for both UST compliance activities and UST remedial action activities. This funding could be reduced or eliminated if the financial responsibility rules for Class III owners and operators are not adopted.

2. Delay adoption of the proposed rule modifications.

Federal funding could be reduced or eliminated, and authorization could be jeopardized. Delaying the other proposed changes would slightly hamper program management.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

The Department recommends that the Commission authorize the Department to proceed to hearing to take testimony on the proposed modified underground storage tank rules shown in Attachments A,B,C,D,E, and F.

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Rationale for this action is presented in the discussion of alternatives above.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

The recommended action is consistent with legislative policy and with the Department's understanding of EQC direction.

ISSUES FOR COMMISSION TO RESOLVE:

Assuming the Commission supports delegation of the UST program to the State by EPA, there are no issues for the Commission to resolve.

INTENDED FOLLOWUP ACTIONS:

Proceed to give notice of hearing for permanent rule adoption.

Conduct rule hearings during May 1991.

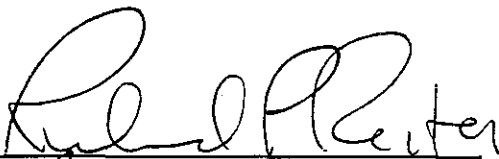
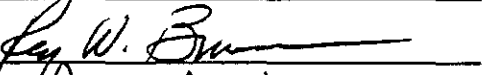
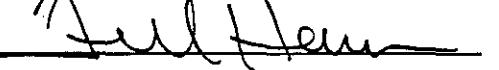
Apply for federal authorization of Oregon's underground storage tank program by August 1, 1991.

Approved:

Section:

Division:

Director:

Report Prepared By: Larry D. Frost

Phone: 229-5769

Date Prepared: April 8, 1991

LDF:lf  
STAFF04.91  
April 8, 1991

OREGON ADMINISTRATIVE RULES  
CHAPTER 340, DIVISION 150 - DEPARTMENT OF ENVIRONMENTAL QUALITY

MODIFICATIONS TO UNDERGROUND STORAGE TANK RULES  
ORS 466.705 through 466.835 and ORS 466.895 through 466.995

**Purpose and Scope**

340-150-001 (1) These rules are promulgated in accordance with and under the authority of ORS 466.705 through ORS 466.835 and ORS 466.895 through 466.995.

(2) The purpose of these rules is;

(a) to provide for the regulation of underground storage tanks to protect the public health, safety, welfare and the environment from the potential harmful effects of spills and releases from underground tanks used to store regulated substances, and

(b) to establish requirements for the prevention and reporting of releases and for taking corrective action to protect the public and the environment from releases from underground storage tanks.

(3) A secondary purpose is to obtain state program approval to manage underground storage tanks in Oregon in lieu of the federal program.

(4) Scope.

(a) OAR 340-150-002 incorporates, by reference, underground storage tank technical and financial responsibility regulations of the federal program, included in 40 CFR 280, Subparts A, B, C, D, E, F, G, and H. Persons must consult these Subparts of 40 CFR 280 to determine applicable underground storage tank requirements. Additionally, persons must consult OAR Chapter 340, Division 122 for the applicable release reporting and corrective action requirements for underground storage tanks containing petroleum.

(b) OAR 340-150-003 through -004 incorporates new language to be used in lieu of [amendments to] the underground storage tank technical and financial responsibility regulations of the federal program, included in 40 CFR 280, Subparts A, B, C, D, E, F, G, and H.

(c) OAR 340-150-010 through -150 establishes requirements for underground storage tank permits, notification requirements for persons who sell underground storage tanks, and persons who deposit or cause to have deposited a regulated substance into an underground storage tank.

**Adoption of United States Environmental Protection Agency Underground Storage Tank Regulations.**

340-150-002 (1) Except as otherwise modified or specified by these rules, the rules and regulations governing the technical standards, corrective action, and financial responsibility requirements for owners and operators of underground storage tanks, prescribed by the United States Environmental Protection Agency in Title 40 Code of Federal Regulations, Part 280, amendments thereto promulgated prior to July 1, 1991 [May 25, 1990], and Oregon rules [amendments] listed in OAR 340-150-003 and OAR 340-150-004 are

adopted and prescribed by the Commission to be observed by all persons subject to ORS 466.705 through 466.835 and ORS 466.895 through 466.995.

**Oregon Rules Amending the Federal Underground Storage Tank Technical Standards.**

340-150-003 In addition to the regulations and amendments promulgated prior to July 1, 1991 [May 25, 1990], as described in 340-150-002 of these rules, the following rules substituting new language in lieu of [amending] Title 40 Code of Federal Regulations, Part 280 Subparts A,B,C,D,E, [D,]F, and G are adopted and prescribed by the Commission to be observed by all persons subject to ORS 466.705 through 466.835 and ORS 466.985 through 466.995 with the following exceptions.

(1) The following language shall be substituted in lieu of 40 CFR 280.10(a) [shall read, as follows]:

(a) The requirements of this Part apply to all owners and operators of an UST system as defined in 280.12 except as otherwise provided in paragraphs (b), (c), and (d) of this section. Any UST system listed in paragraph (c) of this section must meet the requirements of 280.11. Any UST system listed in paragraph (c)(5) of this section must meet the requirements of 280.22.

(2) The following language shall be substituted in lieu of 40 CFR 280.11(b) [shall read, as follows]:

(b) Notwithstanding paragraph (a) of this section, an UST system without corrosion protection may be installed at a site that is determined by a corrosion expert and the implementing agency not to be corrosive enough to cause it to have a release due to corrosion during its operating life. Owners and operators must maintain records that demonstrate compliance with the requirements of this paragraph for the remaining life of the tank.

(3) The following language shall be substituted in lieu of 40 CFR 280.12 "Cathodic protection tester" [shall read, as follows]:

"Cathodic protection tester" means a person licensed as an Underground Storage Tank Supervisor of Cathodic Protection System Testing through meeting the requirements of OAR Chapter 340, Division 160.

(4) The following language shall be substituted in lieu of 40 CFR 280.12 "Implementing Agency" [shall read, as follows]:

"Implementing agency" means the Oregon Department of Environmental Quality.

(5) The following language shall be substituted in lieu of 40 CFR 280.12 "Operator" [shall read, as follows]:

"Operator" means any person in control of, or having responsibility for, the daily operation of the UST system, including the permittee under a permit issued pursuant to OAR Chapter 340, Division 150.

(6) The definition of "Owner" in OAR 340-150-010(11) shall be used in lieu of the definition of "Owner" in [Amend] 40 CFR 280.12 [by deleting the definition "Owner" in it's entirety].

(7) The definition of "Release" in OAR 340-150-010(13) shall be used in lieu of the definition of "Release" in [Amend] 40 CFR 280.12 [by deleting the definition "Release" in it's entirety].

(8) The following language shall be substituted in lieu of 40 CFR 280.12 "Residential tank" [shall read, as follows]:

"Residential tank" is a tank located on property used primarily for single family dwelling purposes.

(9) The following language shall be substituted in lieu of 40 CFR 280.20(a)(2) [shall read, as follows]:

(2) The tank is constructed of steel and cathodically protected in the following manner:

- (i) The tank is coated with a suitable dielectric material;
- (ii) A permanent cathodic protection test station is installed;

Note: The test station can be separate or combined with an existing box and shall be located near the protected structure and away from an anode. The test station shall provide, as a minimum, an electrical connection to the structure and access for placing a reference cell in contact with the soil or backfill. When located below the surface of the ground, the test station design shall prevent run off of surface water into the soil.

(iii) Field-installed cathodic protection systems are designed by a corrosion expert;

(iv) Impressed current systems are designed to allow determination of current operating status as required in § 280.31(c); and

(v) Cathodic protection systems are operated and maintained in accordance with § 280.31 or according to guidelines established by the implementing agency; or

(10) The following language shall be substituted in lieu of 40 CFR 280.20(a)(4)(i) [shall read, as follows]:

(i) The tank is installed at a site that is determined by a corrosion expert and the implementing agency not to be corrosive enough to cause it to have a release due to corrosion during its operating life; and

Note: For the purpose of complying with Paragraph 280.20(a)(4)(i), approval by the Department shall be given after reviewing the data and

information submitted by the corrosion expert and a finding that the corrosion expert's determination is justified.

(11) The following language shall be substituted in lieu of 40 CFR 280.20(a)(5) [shall read, as follows]:

(5) The tank construction and corrosion protection are determined by the implementing agency to be designed to prevent the release or threatened release of any stored regulated substance in a manner that is no less protective of human health and the environment than paragraphs (a)(1) through (4) of this section.

Note: For the purpose of complying with Paragraph 280.20(a)(5), approval by the Department shall be given after reviewing the data and information submitted by a corrosion expert and a finding that the corrosion expert's determination is justified.

(12) The following language shall be substituted in lieu of 40 CFR 280.20(b)(3)(i) [shall read, as follows]:

(i) The piping is installed at a site that is determined by a corrosion expert and the implementing agency to not be corrosive enough to cause it to have a release due to corrosion during its operating life; and

Note: For the purpose of complying with Paragraph 280.20(b)(3)(i), approval by the Department shall be given after reviewing the data and information submitted by the corrosion expert and a finding that the corrosion expert's determination is justified.

(13) The following language shall be substituted in lieu of 40 CFR 280.20(b)(4) [shall read, as follows]:

(4) The piping construction and corrosion protection are determined by the implementing agency to be designed to prevent the release or threatened release of any stored regulated substance in a manner that is no less protective of human health and the environment than the requirements in paragraphs (b)(1) through (3) of this section.

Note: For the purpose of complying with Paragraph 280.20(b)(4), approval by the Department shall be given after reviewing the data and information submitted by a corrosion expert and a finding that the corrosion expert's determination is justified.

(14) The following language shall be substituted in lieu of 40 CFR 280.20(e) [shall read, as follows]:

(e) Certification of installation. All owners and operators must ensure that one or more of the following methods of certification, testing, or inspection is used to demonstrate compliance with paragraph (d) of this section by providing a certification of compliance on the UST notification form in accordance with § 280.22.

- (1) The installer has been licensed by the implementing agency; or
- (2) The installation has been inspected and certified by a registered professional engineer with education and experience in UST system installation; or
- (3) The owner and operator have complied with another method for ensuring compliance with paragraph (d) of this section that is determined by the implementing agency to be no less protective of human health and the environment.

(15) The following language shall be substituted in lieu of 40 CFR 280.22(a) [shall read, as follows]:

(a) Any owner who brings an underground storage tank system into use after May 8, 1986, must, 30 days prior to installing, closing, using, or bringing such tank into use, submit, in the form prescribed in Sections I through VI of Appendix I of this Part (or appropriate state form), a notice of existence of such tank system to the Implementing Agency.

(16) The following language shall be substituted in lieu of 40 CFR 280.22(d) [shall read, as follows]:

(d) Notices required to be submitted under paragraph (a) of this section must provide all of the information in Sections I through VI of the prescribed form (or appropriate state form) for each tank for which notice must be given. Notices for tanks installed after December 22, 1988 must, within 30 days after bringing such tank into use, also provide all of the information in Section VII of the prescribed form (or appropriate state form) for each tank for which notice must be given.

(17) The following language shall be added to 40 CFR 280.22 [is amended] by adding a new paragraph (h) [that shall read, as follows]:

(h) Unless the implementing agency agrees to waive the requirement, at least 3 working days before beginning work to install, replace, decommission, or upgrade an UST, owners and operators or the licensed service provider performing the work must notify the implementing agency of the confirmed date and time the work will begin to allow observation of the work by the implementing agency.

(18) The following language shall be substituted in lieu of 40 CFR 280.41(a) [shall read, as follows]:

(a) Tanks. Tanks must be monitored at least every 30 days for releases using one of the methods listed in § 280.43 (d), (g) and (h) or must be monitored daily for releases using one of the methods listed in § 280.43 (e) and (f) [through (h)] except that:

(19) The following language shall be substituted in lieu of 40 CFR 280.41(b)(1)(ii) [shall read, as follows]:

(ii) Have an annual line tightness test conducted in accordance

with § 280.44(b) or have daily monitoring conducted in accordance with § 280.44(c).

(20) The following language shall be added to [Amend] 40 CFR 280.43 by adding a new paragraph (f)(9)[, that shall read, as follows]:

(9) The ground water monitoring system is determined by the implementing agency to be designed so that the risk to human health and the environment is not increased.

Note: For the purpose of complying with the requirements of this section, approval by the implementing agency shall be given after reviewing the data and design information submitted by a registered professional engineer or a registered geologist who is especially qualified by education and experience to design release detection systems and a finding that the leak detection system is designed so that the risk to human health and the environment is not increased.

(21) The following language shall be substituted in lieu of 40 CFR 280 Subpart F [shall read, as follows]:

Subpart F--Release Response and Corrective Action for UST Systems Containing Hazardous Substances

(22) 40 CFR 280.60 shall read, as follows:

§ 280.60 General.

Owners and operators or responsible persons of hazardous substance UST systems must, in response to a confirmed release from the UST system, comply with the requirements of this subpart except for USTs excluded under § 280.10(b), where UST systems contain petroleum, and UST systems subject to RCRA Subtitle C corrective action requirements under section 3004(u) of the Resource Conservation and Recovery Act, as amended.

Note: Release Response and Corrective Action for UST Systems Containing Petroleum must meet the requirements of OAR Chapter 340 Division 122.

(23) The following language shall be substituted in lieu of 40 CFR 280.61(a) [shall read, as follows]:

(a) Report the release to the implementing agency (e.g., by telephone or electronic mail);

(1) All below-ground releases from the UST system in any quantity;

(2) All above-ground releases to land from the UST system in excess of reportable quantities as defined in OAR Chapter 340, Division 108, if the owner and operator or responsible person is unable to contain or clean up the release within 24 hours; and

(3) All above-ground releases to the waters of the state.

(24) The following language shall be substituted in lieu of 40 CFR 280.62(a) [shall read, as follows]:



(a) Unless directed to do otherwise by the implementing agency, owners and operators or responsible persons must perform the following abatement measures:

(25) The following language shall be substituted in lieu of 40 CFR 280.62(a)(4) [shall read, as follows]:

(4) Remedy hazards posed by contaminated soils that are excavated or exposed as a result of release confirmation, site investigation, abatement, or corrective action activities. If these remedies include treatment or disposal of soils, the owner and operator or responsible person must comply with applicable state and local requirements;

(26) The following language shall be substituted in lieu of 40 CFR 280.62(b) [shall read, as follows]:

(b) Within 20 days after release confirmation, or within another reasonable period of time determined by the implementing agency, owners and operators or responsible persons must submit a report to the implementing agency summarizing the initial abatement steps taken under paragraph (a) of this section and any resulting information or data.

(27) The following language shall be added to [Amend] 40 CFR 280.62 by adding a new paragraph (c) [that shall read, as follows]:

(c) The owner and operator, or responsible person shall provide any additional information beyond that required under paragraph (b) of this section, as requested by the implementing agency.

(28) The following language shall be substituted in lieu of 40 CFR 280.63(a)(4) [shall read, as follows]:

(4) Results of the free product investigations required under § 280.62(a)(6), to be used by owners and operators or responsible persons to determine whether free product must be recovered under § 280.64.

(29) The following language shall be substituted in lieu of 40 CFR 280.64 Free Product Removal [shall read, as follows]:

§ 280.64 Free product removal.

At sites where investigations under § 280.62(a)(6) indicate the presence of free product, owners and operators or responsible persons must remove free product to the maximum extent practicable as determined by the implementing agency while continuing, as necessary, any actions initiated under §§ 280.61 through 280.63, or preparing for actions required under §§ 280.65 through 280.66. In meeting the requirements of this section, owners and operators or responsible persons must:

(30) The following language shall be substituted in lieu of 40 CFR 280.64(d) [shall read, as follows]:

(d) Unless directed to do otherwise by the implementing agency, prepare and submit to the implementing agency, within 45 days after confirming a release, a free product removal report that provides at least the following information:

(1) The name of the person(s) responsible for implementing the free product removal measures;

(2) The estimated quantity, type, and thickness of free product observed or measured in wells, boreholes, and excavations;

(3) The type of free product recovery system used;

(4) Whether any discharge will take place on-site or off-site during the recovery operation and where this discharge will be located;

(5) The type of treatment applied to, and the effluent quality expected from, any discharge;

(6) The steps that have been or are being taken to obtain necessary permits for any discharge;

(7) The disposition of the recovered free product; and

(8) Other matters deemed appropriate by the implementing agency.

(31) The following language shall be substituted in lieu of 40 CFR 280.65 [shall read, as follows]:

§ 280.65 Corrective Action.

(a) Corrective action for cleanup of releases from underground storage tanks containing regulated substances other than petroleum shall meet the requirements of OAR 340-122-010 through 340-122-110.

(32) The following language shall be substituted in lieu of 40 CFR 280.66 [shall read, as follows]:

Note: OAR 340-122-010 through 340-122-110 contains equivalent requirements.

(33) The following language shall be substituted in lieu of 40 CFR 280.67 [shall read, as follows]:

Note: OAR 340-122-010 through 340-122-110 contains equivalent requirements.

(34) The following language shall be substituted in lieu of 40 CFR 280.71(a) [shall read, as follows]:

(a) At least 30 days before beginning either permanent closure or a change-in-service under paragraphs (b) and (c) of this section, or within another reasonable time period determined by the implementing agency, owners and operators must notify the implementing agency, on a form provided by the implementing agency, of their intent to permanently close or make the change-in-service, UNLESS such action is in response to corrective action. Unless the implementing agency agrees to waive the requirement, at least 3 working days before beginning this permanent closure, owners and operators or the licensed service provider performing the work must notify the implementing agency of the confirmed date and time the closure will begin to allow observation of the closure

by the implementing agency. The required assessment of the excavation zone under §280.72 must be performed after notifying the implementing agency but before completion of the permanent closure or a change-in-service.

(35) The following language shall be substituted in lieu of 40 CFR 280.71(b) [shall read, as follows]:

(b) To permanently close a tank, owners and operators must empty and clean it by removing all liquids and accumulated sludges. Dispose of all liquids and accumulated sludges by recycling or dispose. The disposal method must be approved by the implementing agency prior to disposal. All tanks taken out of service permanently must also be either removed from the ground or filled with an inert solid material. Tanks removed from the ground must be disposed of in a manner approved by the implementing agency. The owner and operator shall document the name of the disposal firm, the disposal method and disposal location for all liquids, sludges and UST system components including tanks, piping and equipment. The owner and operator or licensed service provider shall provide a completed decommissioning checklist to the implementing agency within 30 days after tank closure.

Note: Liquids, sludges and UST system components may require management as a hazardous waste if contaminated with hazardous materials. If necessary, contact the implementing agency prior to disposal of these items to insure these wastes are correctly managed.

(36) The following language shall be substituted in lieu of 40 CFR 280.71(c) [shall read, as follows]:

(c) Continued use of an UST system to store a non-regulated substance is considered a change-in-service. Before a change-in-service, owners and operators must empty and clean the tank by removing all liquid and accumulated sludge and conduct a site assessment in accordance with § 280.72.

(37) The following language shall be added to [Amend] 40 CFR 280.71 by adding a new subpart (d) [that shall read, as follows]:

(d) The following cleaning and closure procedures shall be used to comply with this section unless the implementing agency has approved alternate procedures and determined these alternate procedures are designed to be no less protective of human health, human safety and the environment:

- (1) American Petroleum Institute Recommended Practice 1604, "Removal and Disposal of Used Underground Petroleum Storage Tanks";
- (2) American Petroleum Institute Publication 2015, "Cleaning Petroleum Storage Tanks";
- (3) American Petroleum Institute Recommended Practice 1631, "Interior Lining of Underground Storage Tanks," may be used as guidance for compliance with this section; and

(4) The National Institute for Occupational Safety and Health "Criteria for a Recommended Standard...Working in Confined Space" may be used as guidance for conducting safe closure procedures at some hazardous substance tanks.

(38) The following language shall be added to [Amend] 40 CFR 280.72 by adding a new subpart (c) [that shall read, as follows]:

(c) The owner and operator must notify the implementing agency and meet the requirement of Subparts E and F if contaminated soil, contaminated ground water, or free product as a liquid or vapor is discovered during the measurement for the presence of a release.

(39) The following language shall be substituted in lieu of 40 CFR 280.72(a) [shall read, as follows]:

(a) Before permanent closure or a change-in-service is completed, owners and operators must measure for the presence of a release where contamination is most likely to be present at the UST site. In selecting sample types, sample locations, and measurement methods, owners and operators must consider the method of closure, the nature of the stored substance, the type of backfill, the depth to ground water, and other factors appropriate for identifying the presence of a release. For USTs containing petroleum, the owner and operator shall measure for the presence of a release by following the sampling and analytical procedures specified in OAR Chapter 340 Division 122. Samples must be taken below the bottom of the tank and below any piping that contained product. A petroleum release shall be considered to have occurred if the contaminant levels are found to exceed the levels specified in OAR Chapter 340 Division 122. For USTs containing regulated substances other than petroleum and for USTs to be closed in-place, the owner and operator shall submit a sampling plan to the implementing agency for its approval prior to beginning closure.

(40)[(43)] The following language shall be substituted in lieu of 40 CFR 280 Appendix II [shall read, as follows]:

APPENDIX II - LIST OF AGENCIES DESIGNATED TO RECEIVE NOTIFICATIONS

Oregon (State Form)  
Underground Storage Tank Program  
Hazardous and Solid Waste Division  
Department of Environmental Quality  
811 S.W. Sixth Avenue  
Portland, Oregon 98204  
503/229-5788

Report Releases to the Oregon Emergency Response System:

1-800-452-0311 or  
1-800-452-4011

(41) The following language shall be added to 40 CFR 280.21 by adding a new subparagraph (e):

(e) At least 30 days before beginning the upgrading of an existing UST system under paragraphs (a) through (d) of this section, or within another reasonable time period determined by the implementing agency, owners and operators must notify the implementing agency, on a form provided by the implementing agency, of their intent to upgrade an existing underground storage tank system. Unless the implementing agency agrees to waive the requirement, at least 3 working days before beginning the upgrade, owners and operators or the licensed service provider performing the work must notify the implementing agency of the confirmed date and time the upgrade will begin to allow observation by the implementing agency. The owner and operator or licensed service provider shall provide a completed installation check list within 30 days after completion of work.

(42) The following language shall be used in lieu of 40 CFR 280.34(a):

(a) Reporting. Owners and operators must submit the following information to the implementing agency:

(1) Notification for all UST systems (§ 280.22), which includes certification of installation for all new UST systems (§ 280.29(e));

(2) Reports of all releases including suspected releases (§ 280.50), spills and overfills (§ 280.53), and confirmed releases (§ 280.61);

(3) Corrective actions planned or taken including initial abatement measures (§ 280.62), initial site characterization (§ 280.63), free product removal (§ 280.64), investigation of soil and ground-water cleanup (§ 280.65), and corrective action plan (§ 280.66);

(4) A notification before permanent closure or change-in-service (§ 280.71; and

(5) A notification before upgrading an existing UST system (§ 280.21).

(43) The following language shall be used in lieu of 40 CFR 280.41(a)(3):

(3) Tanks with capacity of 1,000 gallons or less may use weekly tank gauging (conducted in accordance with § 280.43(b)).

(44) The following language shall be used in lieu of 40 CFR 280.42(a):

(a) Release detection at existing UST systems must meet the requirements for petroleum UST systems in § 280.41. By December 22, 1998, all existing hazardous substance UST systems must meet the release detection requirements for new systems in paragraph (b) of this section.

(45) The following language shall be used in lieu of 40 CFR 280.43(b)(5):

(3) Only tanks of 1,000 gallons or less nominal capacity may use this as the sole method of release detection. Tanks of 1,001 to 2,000 gallons may use the method in place of manual inventory control in § 280.43(a). Tanks of greater than 2,000 gallons nominal capacity may not use this method to meet the requirements of this subpart.

#### Oregon Rules Amending the Federal Underground Storage Tank Financial Responsibility Regulations

340-150-004 In addition to the regulations and amendments promulgated prior to July 1, 1991 [May 25, 1990], as described in 340-150-002 of these rules, the following rules substituting new language in lieu of [amending] Title 40 Code of Federal Regulations, Part 280, Subpart H are adopted and prescribed by the Commission to be observed by all persons subject to ORS 466.705 through 466.835 and ORS 466.985 through 466.995 with the following exceptions.

(1) The following language shall be substituted in lieu of 40 CFR 280.91: [shall read, as follows:]

Owners of petroleum underground storage tanks are required to comply with the requirements of this subpart by the following dates:

(a) All petroleum marketing firms owning 1,000 or more USTs and all other UST owners that report a tangible net worth of \$20 million or more to the U.S. Securities and Exchange Commission (SEC), Dun and Bradstreet, the Energy Information Administration, or the Rural Electrification Administration: January 24, 1989, except that compliance with §280.94(b) is required by : July 24, 1989.

(b) All petroleum marketing firms owning 100-999 USTs: October 26, 1989.

(c) All petroleum marketing firms owning 13-99 USTs at more than one facility: August 1, 1991.

#### Underground Storage Tank Permit Required

340-150-020 (1) After February 1, 1989, no person shall install, bring into operation, operate or decommission an underground storage tank without first obtaining an underground storage tank permit from the department.

(2) Permits issued by the department will specify those activities and operations which are permitted as well as requirements, limitations and conditions which must be met.

(3) A new application must be filed with the department to obtain modification of a permit.

(4) After February 1, 1989, permits are issued to the person designated as the permittee for the activities and operations of record and shall be automatically terminated:

(a) Within 120 days after any change of ownership of property in which the tank is located, ownership of tank or permittee unless a new underground storage tank permit application is submitted in accordance with these rules;

(b) Within 120 days after a change in the nature of activities and operations from those of record in the last application unless a new

underground storage tank permit application is submitted in accordance with these rules;

(c) Upon issuance of a new or modified permit for the same operation;

(5) The department may issue a temporary permit pending adoption of additional Federal underground storage tank technical standards.

(6) The permit conditions may be modified when the Commission adopts new rules.

(7) The department may issue a temporary permit addendum to define special management conditions during tank operation, installation, upgrade, retrofit, or decommissioning, including but not limited to management of contaminated solid waste, hazardous waste, contaminated water, or discharge of air contaminants.

#### Underground Storage Tank Permit Application Required

340-150-030 (1) On or before May 1, 1988 the following persons shall apply for an underground storage tank permit from the department.

(a) An owner of an underground storage tank currently in operation;

(b) An owner of an underground storage tank taken out of operation between January 1, 1974, and May 1, 1988 and not permanently decommissioned in accordance with Section 340-150-130; and

(c) An owner of an underground storage tank that was taken out of operation before January 1, 1974, but that still contains a regulated substance.

(2) After May 1, 1988 the owner of an underground storage tank shall apply for an underground storage tank permit from the department prior to installation of the tank[,] and placing an existing underground storage tank in operation[,] or modifying an existing permit.

OAR 340-150-112 is added in its entirety.

#### UST FEE WAIVER

340-150-112 (1) The UST permit application fee required by OAR 340-150-070 may be waived by the Director.

(2) An annual UST permit compliance fee required by OAR 340-150-110 may be waived by the Director.

3/26/91  
MODA.150

**OREGON ADMINISTRATIVE RULES  
CHAPTER 340, DIVISION 160 - DEPARTMENT OF ENVIRONMENTAL QUALITY**

**MODIFICATIONS TO RULES FOR REGISTRATION AND LICENSING REQUIREMENTS FOR  
UNDERGROUND STORAGE TANK SERVICE PROVIDERS  
ORS 466.705 through 466.835 and ORS 466.895 through 466.995**

**AUTHORITY, PURPOSE, AND SCOPE**

340-160-005 (1) These rules are promulgated in accordance with and under the authority of ORS 466.750.

(2) The purpose of these rules is to provide for the regulation of companies and persons performing services for underground storage tank systems in order to assure that underground storage tank systems are being serviced in a manner which will protect the public health and welfare and the land and waters within the State of Oregon. These rules establish standards for:

(a) Registration and licensing of firms performing services on underground storage tanks,

(b) Examination, qualification and licensing of individuals who supervise the performance of tank services,

(c) Administration and enforcement of these rules by the Department.

(3) Scope.

(a) OAR 340-160-005 through -150 applies to the installation, retrofitting, decommissioning and testing, by any person, of underground storage tanks regulated by ORS 466.705 through ORS 466.835 and OAR 340-150-001[010] through OAR 340-150-150 except as noted in Subsection (3)(b).

(b) OAR 340-160-005 through OAR 340-160-150 do not apply to services performed on the tanks identified in OAR 340-150[160]-015 or to services performed by the tank owner, property owner or permittee.

**GENERAL PROVISIONS**

340-160-020 (1) After May 1, 1989, no firm shall offer or perform tank services in the State of Oregon without having first registered with the Department.

(2) After September 1, 1989, no tank services provider may install, retrofit or decommission an underground storage tank in the State of Oregon without first obtaining a license from the Department.

(3) After May 1, 1990, no tank services provider shall offer to test or perform a test on an underground storage tank without first having obtained a license from the Department.

(4) After the required date, any tank services provider offering to perform tank services must have registered with or been licensed by the Department. Proof of registration and or licensing must be available at all times a tank services provider is performing tank services.



(5) After the required date, a tank services provider registered and/or licensed to perform tank services is prohibited from offering or performing tank services on regulated tanks unless a regulated tank has been issued a permit by the Department.

(6) Any tank services provider licensed or certified by the Department under the provisions of these rules shall:

(a) comply with the appropriate provisions of OAR 340-160-005 through OAR 340-160-150;

(b) maintain a current address on file with the Department; and

(c) perform tank services in a manner which conforms with all federal and state regulations applicable at the time the services are being performed.

(7) A firm registered or, if required, licensed to perform tank services must submit a checklist to the Department following the completion of a tank installation, [or] retrofit, testing, or decommissioning.

(a) The checklist will be made available on a form provided by the Department.

(b) The installation, [and] retrofit, testing and decommissioning checklist must be signed by an executive officer of the firm and, following September 1, 1989, by the licensed tank services supervisor.

(c) An as-built drawing of the completed tank installation or retrofit shall be provided with the submission of the installation and retrofit checklist.

(8) [After September 1, 1989,] A [a] licensed tank services supervisor shall be present at a tank installation[, ] and retrofit [or decommissioning] project when the following project tasks are being performed:

(a) Preparation of the excavation immediately prior to receiving backfill and the placement of the tank into the excavation;

(b) Any movement of the tank vessel, including but not limited to transferring the tank vessel from the vehicle used to transport it to the project site;

(c) Setting of the tank and its associated piping into the excavation, including placement of any anchoring devices, backfill to the level of the tank, and strapping, if any;

(d) Placement and connection of the piping system to the tank vessel;

(e) Installation of cathodic protection;

(f) All pressure testing of the underground storage tank system, including associated piping, performed during the installation or retrofitting;

(g) Completion of the backfill and filling of the installation.

(h) Preparation for and installation of tank lining systems.

(i) Tank excavation.

[ (j) Tank purging or inerting.]

[ (k) Removal and disposal of tank contents from cleaning.]

(9) A licensed tank services supervisor shall be present at a tank decommissioning project when the following project tasks are being performed:

(a) Tank excavation.

(b) Removal and capping vent and product lines.

(c) Cleaning tank and removal of tank contents.

(d) Tank purging or inerting.

(e) Any movement of the tank vessel, including but not limited to

transferring the tank vessel to the vehicle used to transport it from the project site.

(f) Collection of contaminated soil, water and media samples.

(10) A licensed tank services supervisor shall be present during the testing of an underground storage tank cathodic protection system.

(11) A licensed tank services supervisor shall be present during the leak detection testing of an underground storage tank system.

(12)[(9)] A licensed tank services provider shall report the existence of any condition relating to an underground tank system that has or may result in a release of the tank's contents to the environment. This report shall be provided to the Department within 72 hours of the discovery of the condition except that, a report is not required where the owner or operator has already notified pursuant to other provisions of Oregon law.

(13)[(10)] The requirements of this part are in addition to and not in lieu of any other licensing and registration requirement imposed by law.

NOTE: Additional Oregon licenses may be required when working on underground storage tanks. See Construction Contractors License requirements in OAR 812-02-000 through -030 and Monitoring Well Constructor License requirements in OAR 690-240-005 through -180.

#### SUPERVISOR EXAMINATION AND LICENSING

340-160-035 (1) To obtain a license from the Department to supervise the installation, retrofitting, decommissioning or testing of an underground storage tank, an individual must:

(a) take and pass a qualifying examination approved by the Department;  
or

(b) meet the requirements for licensing by reciprocity by providing proof, acceptable to the Department. The applicant must:

(A) successfully pass an equivalent supervisors examination in another jurisdiction; and

(B) demonstrate knowledge of applicable Oregon rules and regulations.

(2) Applications for Supervisor Licenses - General Requirements

(a) Applications must be submitted to the Department within thirty (30) days of passing the qualifying examination.

(b) Applications shall be submitted on forms prescribed by the Department and shall be accompanied by the appropriate fee.

(3) The application to be a Licensed Supervisor shall include:

(a) Documentation that the applicant has successfully passed the Supervisor examination.

(b) Any additional information that the Department may require.

(4) A license is valid for a period of twenty-four (24) months after the date of issue.

(5) Renewals:

(a) License renewals must be applied for in the same manner as the application for the original license, including re-examination.

(6) The Department may suspend or revoke a Supervisor's license for failure to comply with any state or federal rule or regulation pertaining to the management of underground storage tanks.

(7) If a Supervisor's license is revoked, an individual may not apply

for another supervisor license prior to ninety (90) days after the revocation date.

(8) Upon issuance of a Supervisor's license, the Department shall issue an identification card to all successful applicants which shows the license number and license expiration date.

(9) The supervisor's license identification card shall be available for inspection at each project site.

#### RECIPROCITY WITH OTHER JURISDICTIONS

340-160-054 The Department may develop agreements with other jurisdictions for the purposes of establishing reciprocity in training, licensing, and certification if the Department finds that the training, licensing and certification standards of the other jurisdiction are at least as stringent as those required by these rules.

#### FEES

340-160-150 (1) Fees shall be assessed to provide revenues to operate the underground storage tank services licensing program. Fees are assessed for the following:

- (a) Tank Services Provider
- (b) Supervisor Examination
- (c) Supervisor License
- (d) Examination Study Guides

(2) Tank services providers shall pay a non-refundable registration fee of \$25.

(3) Tank services providers shall pay a non-refundable license application fee of \$100 for a twenty-four (24) month license.

(4) Individuals taking the supervisor licensing qualifying examination shall pay a non-refundable examination fee of \$25.

(5) Individuals seeking to obtain a supervisor's license shall pay a non-refundable license application fee of \$25 for a two year license.

(6) Examination study guides shall be made available to the public for the cost of production [\$10].

OREGON ADMINISTRATIVE RULES  
CHAPTER 340, DIVISION 162 - DEPARTMENT OF ENVIRONMENTAL QUALITY

MODIFICATIONS TO  
REGISTRATION AND LICENSING REQUIREMENTS FOR UNDERGROUND  
STORAGE TANK SOIL MATRIX CLEANUP SERVICE PROVIDERS AND SUPERVISORS  
ORS 466.705 through 466.835 and ORS 466.895 through 466.995

GENERAL PROVISIONS

340-162-020 (1) After January 1, 1991, no firm shall offer underground storage tank soil matrix cleanup services without first having obtained a license from the Department.

(2) Proof of licensing must be available at all times a service provider is performing soil matrix cleanup services.

(3) After January 1, 1991, Underground Storage Tank Soil Matrix Cleanup Service Providers licensed to perform cleanup services are prohibited from offering or performing cleanup services on regulated underground storage tanks unless an underground storage tank has been issued a permit by the Department.

(4) Any Underground Storage Tank Soil Matrix Cleanup Service Provider licensed or certified by the Department under the provisions of these rules shall:

(a) comply with the appropriate provisions of OAR 340-162-005 through OAR 340-162-150;

(b) comply with the appropriate provisions of OAR 340-122-305 through OAR 340-122-360;

(c) maintain a current address on file with the Department; and

(d) perform underground storage tank soil matrix cleanup services in a manner which conforms with all federal and state regulations applicable at the time the services are being performed.

(5) A firm licensed to perform underground storage tank soil matrix cleanup services must submit a checklist to the Department following the completion of a soil matrix cleanup. The checklist form will be made available by the Department.

(6) After January 1, 1991, a licensed underground storage tank soil matrix cleanup services supervisor shall be present at a tank site when the following tasks are being performed:

(a) During all excavations made after a leak is suspected or has been confirmed;

(b) When any tanks or lines are removed or decommissioned as a result of a suspected or confirmed release;

(c) When all soil and /or water samples are collected, stored, and packed for shipping to the analytical testing laboratory;

(d) When any soil borings, back-hoe pits or other excavations are made for the purpose of investigating the extent of contamination;

(e) During removal from the open excavation or disposal of any free product or groundwater; and

(7) After January 1, 1991 Underground Storage Tank Soil Matrix Service Providers shall not backfill or close a soil matrix cleanup excavation site before a Department inspection unless authorized verbally or in writing by the Department. [Verbal approvals will be confirmed in writing within 30 days by the Department.]

NOTE: Additional Oregon licenses may be required when performing soil cleanup services at underground storage tanks and heating oil tanks. See Construction Contractors License requirements in OAR 812-02-000 through -030 and Monitoring Well Constructor License requirements in OAR 690-240-005 through -180.

#### SUPERVISOR EXAMINATION AND LICENSING

340-162-035 (1) To obtain a license from the Department to supervise underground storage tank soil matrix cleanup services an individual must:

(a) take and pass a qualifying examination approved by the Department;  
or

(b) meet the requirements for licensing by reciprocity by providing proof, acceptable to the Department. The applicant must:

(A) successfully pass an equivalent supervisors examination in another jurisdiction; and

(B) demonstrate knowledge of applicable Oregon rules and regulations.

(2) Applications for Underground Storage Tank Soil Matrix Cleanup Supervisor Licenses - General Requirements

(a) Applications must be submitted to the Department within thirty (30) days of passing the qualifying examination.

(b) Application shall be submitted on forms provided by the Department and shall be accompanied by the appropriate fee.

(3) The application to be a Licensed Underground Storage Tank Soil Matrix Cleanup Supervisor shall include:

(a) Documentation that the applicant has successfully passed the Underground Storage Tank Soil Matrix Cleanup Supervisor examination.

(b) Any additional information that the Department may require.

(4) A license is valid for a period of twenty-four (24) months after the date of issue.

(5) License renewals must be applied for in the same manner as the application for the original license, including re-examination.

(6) Suspension and Revocation

(a) The Department may suspend or revoke an Underground Storage Tank Soil Matrix Cleanup Supervisor's license for failure to comply with any state or federal rule or regulation of underground storage tanks.

(b) If a Soil Matrix Cleanup Supervisor's license is revoked, an individual may not apply for another supervisor license prior to ninety (90) days after the revocation date.

(7) Upon issuance of an Underground Storage Tank Soil Matrix Cleanup Supervisor's license, the Department shall issue an identification card to all successful applicants which shows the license number and license expiration date.

(8) The supervisor's license identification card shall be available for inspection at each site.

## RECIPROCITY WITH OTHER JURISDICTIONS

340-162-054 The Department may develop agreements with other jurisdictions for the purposes of establishing reciprocity in training, licensing, and certification if the Department finds that the training, licensing and certification standards of the other jurisdiction are at least as stringent as those required by these rules.

### FEES

340-162-150 (1) Fees shall be assessed to provide revenues to operate the underground storage tank soil matrix cleanup services licensing program. Fees are assessed for the following:

- (a) Underground Storage Tank Soil Matrix Cleanup Service Provider.
- (b) Underground Storage Tank Soil Matrix Cleanup Supervisors

Examination.

- (c) Underground Storage Tank Soil Matrix Cleanup Supervisors License.
- (d) Underground Storage Tank Soil Matrix Cleanup Examination Study

Guides.

(2) Underground Storage Tank Soil Matrix Cleanup service providers shall pay a non-refundable license application fee of \$100 for a twenty-four (24) month license.

(3) Individuals taking the underground storage tank soil matrix cleanup supervisor licensing qualifying examination shall pay a non-refundable examination fee of \$25.

(4) Individuals seeking to obtain an underground storage tank soil matrix cleanup supervisor's license shall pay a non-refundable license application fee of \$25 for a two year license.

(5) Examination study guides shall be made available to the public for the cost of production [\$10].

(5)[(6)] Replacement licenses will be provided by the Department for a fee of \$10.

4/8/91  
MODC.162

OREGON ADMINISTRATIVE RULES  
CHAPTER 340, DIVISION 163 - DEPARTMENT OF ENVIRONMENTAL QUALITY

MODIFICATIONS TO  
REGISTRATION AND LICENSING REQUIREMENTS FOR HEATING OIL TANK SOIL  
MATRIX CLEANUP SERVICE PROVIDERS AND SUPERVISORS  
ORS 466.705 through 466.835 and ORS 466.895 through 466.995

GENERAL PROVISIONS

340-163-020 (1) After January 1, 1991, no firm shall offer heating oil tank soil matrix cleanup services without first having obtained a Heating Oil Tank Soil Matrix Cleanup Service Provider license from the Department.

(2) Proof of licensing must be available at all times a service provider is performing soil matrix cleanup services.

(3) Any Heating Oil Tank Soil Matrix Cleanup Service Provider licensed or certified by the Department under the provisions of these rules shall:

(a) comply with the appropriate provisions of OAR 340-163-005 through OAR 340-163-150;

(b) comply with the appropriate provisions of OAR 340-122-305 through OAR 340-122-363;

(c) maintain a current address on file with the Department; and

(d) perform soil matrix cleanup services in a manner which conforms with all federal and state regulations applicable at the time the services are being performed.

(4) A firm licensed to perform heating oil tank soil matrix cleanup services must submit a checklist to the Department following the completion of a soil matrix cleanup. The checklist form will be made available by the Department.

(5) After January 1, 1991, a licensed Heating Oil Tank Soil Matrix Cleanup Services Supervisor shall be present at a tank site when the following tasks are being performed.

(a) During all excavations made after a leak is suspected or has been confirmed;

(b) When any tanks or lines are permanently closed by removal from the ground or filled in place as a result of a suspected or confirmed release;

(c) When all soil and /or water samples are collected and packed for shipping to the analytical testing laboratory;

(d) When any soil borings, back-hoe pits or other excavations are made for the purpose of investigating the extent of contamination;

(e) During removal from the open excavation or disposal of any free product or groundwater; and

(6) After January 1, 1991 Service Providers shall not backfill or close a soil cleanup excavation site before a Department inspection unless authorized verbally or in writing by the Department. [Verbal approvals will be confirmed in writing within 30 days by the Department.]

FEES

340-163-150 (1) Fees shall be assessed to provide revenues to operate the heating oil tank soil matrix cleanup services licensing program. Fees are assessed for the following:

- (a) Heating Oil Tank Soil Matrix Cleanup Service Provider.
- (b) Heating Oil Tank Soil Matrix Cleanup Supervisors Examination.
- (c) Heating Oil Tank Soil Matrix Cleanup Supervisors License.
- (d) Heating Oil Tank Soil Matrix Examination Study Guides.

(2) Heating oil tank soil matrix cleanup service providers shall pay a non-refundable license application fee of \$100 for a twenty-four (24) month license.

(3) Individuals taking the Heating Oil Tank Soil Matrix Cleanup Supervisor licensing examination shall pay a non-refundable examination fee of \$25.

(4) Individuals seeking to obtain a Heating Oil Tank Soil Matrix Cleanup Supervisor's license shall pay a non-refundable license application fee of \$25 for a two year license.

(5) Examination study guides shall be made available to the public for the cost of production [\$10].

~~(5)~~[(6)] Replacement licenses will be provided by the Department for a fee of \$10.

3/2/91  
MODC.163



OREGON ADMINISTRATIVE RULES  
CHAPTER 340, DIVISION 12 - DEPARTMENT OF ENVIRONMENTAL QUALITY

MODIFICATIONS TO RULES FOR ENFORCEMENT PROCEDURE AND CIVIL PENALTIES

UNDERGROUND STORAGE TANK AND HEATING OIL TANK CLASSIFICATION OF VIOLATIONS  
340-12-067

Violations pertaining to Underground Storage Tanks and cleanup of petroleum contaminated soil at heating oil tanks shall be classified as follows:

- (1) Class One:
  - (a) Violation of a Commission or Department Order;
  - (b) Failure to [promptly] report a release from an underground storage tank [which poses a major risk of harm to public health or the environment] or a heating oil tank as required by OAR 340-150-001 through -150, OAR 340-160-005 through -150, OAR 340-162-005 through -150, OAR 340-163-005 through -150, and OAR 340-122-205 through -260;
  - (c) Failure to initiate the investigation or cleanup of a release from an underground storage tank or a heating oil tank [which poses a major risk of harm to public health or the environment];
  - (d) Failure to prevent a release [which poses a major risk of harm to public health or the environment];
  - (e)[(i)] Failure to submit required reports from the investigation or cleanup of a release [which poses a major risk of harm to public health or the environment];
  - (f)[(j)] Failure to provide access to premises or records;
  - (g)[(e)] Placement of a regulated material into an unpermitted underground storage tank;
  - (h)[(f)] Installation of an underground storage tank in violation of the standards or procedures adopted by the Department;  
[ (g) Providing installation, retrofitting, decommissioning or testing services on an underground storage tank without first registering or obtaining an underground storage tank service providers license;]  
[ (h) Providing supervision of the installation, retrofitting, decommissioning or testing of an underground storage tank without first obtaining an underground storage tank supervisors license;]
  - (i)[(k)] Any other violation related to underground storage tanks or cleanup of petroleum contaminated soil at heating oil tanks which poses a major risk of harm to public health and the environment.

- (2) Class Two:
  - [ (a) Failure to promptly report a release from an underground storage tank which poses a moderate risk of harm to public health or the environment;]
  - [ (b) Failure to initiate investigation or cleanup of a release which poses a moderate risk of harm to public health or the environment;]

[ (c) Failure to prevent a release which poses a moderate risk of harm to public health or the environment;]

[ (d) Failure to submit required reports from the investigation or cleanup of a release which poses a moderate risk of harm to public health or the environment;]

(a) Providing installation, retrofitting, decommissioning, or testing services on an underground storage tank or providing cleanup of petroleum contaminated soil at an underground storage tank site without first registering or obtaining an underground storage tank service providers license;

(b) Providing supervision of the installation, retrofitting, decommissioning, or testing of an underground storage tank or providing supervision of cleanup of petroleum contaminated soil at an underground storage tank site without first obtaining an underground storage tank supervisors license;

(c)[(e)] Failure to conduct required underground storage tank monitoring and testing activities;

(d)[(f)] Failure to conform to operational standards for underground storage tanks and leak detection systems;

(e)[(g)] Failure to obtain a permit prior to the installation or operation of an underground storage tank;

(f)[(h)] Failure to properly decommission an underground storage tank;

(g)[(i)] Providing installation, retrofitting, decommissioning or testing services on an regulated underground storage tank or providing cleanup of petroleum contaminated soil at a regulated underground storage tank that does not have a permit;

(h)[(j)] Failure by a seller or distributor to obtain the tank permit number prior to depositing product into the underground storage tank or failure to maintain a record of the permit numbers;

(i)[(k)] Allowing the installation, retrofitting, decommissioning, testing of an underground storage tank or cleanup of petroleum contaminated soil at an underground storage tank by any person not licensed by the department;

(j) Allowing cleanup of petroleum contaminated soil at a heating oil tank by any person not licensed by the Department;

(k) Providing petroleum contaminated soil cleanup services at a heating oil tank without first registering or obtaining a heating oil tank soil matrix cleanup service provider license;

(l) Providing supervision of petroleum contaminated soil cleanup at a heating oil tank without first registering or obtaining a heating oil tank soil matrix cleanup supervisor license;

(m)[(1)] Any other violation related to underground storage tanks or cleanup of petroleum contaminated soil at a heating oil tank with poses a moderate risk of harm to public health or the environment.

(3) Class Three:

[ (a) Failure to promptly report a release from an underground storage tank which poses a minor risk of harm to public health or the environment;]

[ (b) Failure to initiate investigation or cleanup of a release which poses a minor risk of harm to public health or the environment;]

[ (c) Failure to prevent a release which poses a minor risk of harm to public health or the environment;]

[ (d) Failure to submit required reports from the investigation or cleanup of a release which poses a minor risk of harm to public health or the environment;]

(a)[(e)] Failure to submit an application for a new permit when an underground storage tank is acquired by a new owner;

(b)[(f)] Failure of a tank seller or product distributor to notify a tank owner or operator of the Department's permit requirements;

(c)[(g)] Decommissioning an underground storage tank without first providing written notification to the Department;

(d)[(h)] Failure to provide information to the Department regarding the contents of an underground storage tank;

(e)[(i)] Failure to maintain adequate decommissioning records;

(f)[(j)] Failure by the tank owner to provide the permit number to persons depositing product into the underground storage tank;

(g) Failure to report a suspected release from an underground storage tank.

(h)[(k)] Any other violation related to underground storage tanks or cleanup of petroleum contaminated soil at heating oil tanks which poses a minor risk of harm to public health and the environment.

March 26, 1991  
MODD-12.067

MODIFICATIONS TO CLEANUP RULES FOR LEAKING PETROLEUM UST SYSTEMS

OAR 340-122-205 to 340-122-260

340-122-205 Purpose

- (1) These rules establish the standards and process to be used for the determination of investigation and cleanup activities necessary to protect the public health, safety, welfare and the environment in the event of a release or threat of a release from a petroleum UST system subject to regulation under ORS 466.705 to 466.835 and 466.895, and [466.540 to 466.590] 465.200 to 465.380.

340-122-210 Definitions

For the purpose of this section, terms not defined in this subsection have the meanings set forth in ORS [466.540] 465.200 and 466.705. Additional terms are defined as follows unless the context requires otherwise:

- (1) "Above-ground release" means any release to the surface of the land or to surface water. This includes, but is not limited to, releases from the above-ground portion of a petroleum UST system and releases associated with overfills and transfer operations during petroleum deliveries to or dispensing from a petroleum UST system.
- (2) "Ancillary equipment" means any devices including, but not limited to, such devices as piping, fittings, flanges, valves, and pumps used to distribute, meter, or control the flow of regulated substances to and from a petroleum UST system.
- (3) "Below-ground release" means any release to the subsurface of the land or to groundwater that has concentrations which are reportable by TPH-HCID. This includes, but is not limited to, releases from the below-ground portion of a petroleum UST system and releases associated with overfills and transfer operations as the petroleum is delivered to or dispensed from a petroleum UST system.
- (4) "Cleanup" or "cleanup activity" has the same meaning as "corrective action" as defined in ORS 466.705 or "remedial action" as defined in ORS [466.540] 465.200.
- (5) "Director" means the Director of the Department of Environmental Quality or the Director's authorized representative.

- (6) "Excavation zone" means the area containing the tank system and backfill material bounded by the ground surface, walls, and floor of the pit and trenches into which the petroleum UST system is placed at the time of installation.
- (7) "Free product" means petroleum in the non-aqueous phase (e.g., liquid not dissolved in water).
- (8) "Heating oil" means petroleum that is No. 1, No.2, No.4-heavy, No. 5-light, No. 5-heavy, and No. 6 technical grades of fuel oil; other residual fuel oils (including Navy Special Fuel Oil and Bunker C); and other fuels when used as substitutes for one of these fuel oils.
- (9) "Motor fuel" means petroleum or a petroleum-based substance that is motor gasoline, aviation gasoline, No.1 or No.2 diesel fuel, or any grade of gasohol, typically used in the operation of a motor engine.
- (10) "Owner", as used in this section, has the meaning set forth in ORS 466.705(8).
- (11) "Permittee", as used in this section, has the meaning set forth in ORS 466.705(9).
- (12) "Petroleum" means gasoline, crude oil, fuel oil, diesel oil, lubricating oil, oil sludge, oil refuse, and crude oil fractions and refined petroleum fractions, including gasoline, kerosene, heating oils, diesel fuels, and any other petroleum related product, or waste or fraction thereof that is liquid at a temperature of 60 degrees Fahrenheit and a pressure of 14.7 pounds per square inch absolute. (Note: this definition does not include any substance identified as a hazardous waste under 40 CFR Part 261.)
- (13) "Petroleum UST system" means any one or combination of tanks, including underground pipes connected to the tanks, that is used to contain an accumulation of petroleum and the volume of which, including the volume of the underground pipes connected to the tank, is 10 percent or more beneath the surface of the ground; and includes associated ancillary equipment and containment system.
- (14) "Responsible person" means any person ordered or authorized to undertake remedial actions or related activities under ORS [466.540 through 466.590] 465.200 through 465.380.

340-122-215 Scope and Applicability

- (1) Sections 340-122-205 through 340-122-360 of these rules apply to:
  - (a) An owner or permittee ordered or authorized to conduct cleanup or related activities by the Director under ORS 466.705 to 466.835 and 466.895; or
  - (b) Any person ordered or authorized to conduct remedial actions or

related activities by the Director under ORS [466.540 to 466.590] 465.200 to 465.380.

- (2) Notwithstanding OAR 340-122-215(1)(b) and 340-122-360(3), the Director may require that investigation and cleanup of a release from a petroleum UST system be governed by OAR 340-122-010 to 340-122-110, if, based on the magnitude or complexity of the release or other considerations, the Director determines that application of OAR 340-122-010 through 340-122-110 is necessary to protect the public health, safety, welfare and the environment.
- (3) Cleanup of releases from UST systems containing regulated substances under ORS 466.705 other than petroleum shall be governed by OAR 340-122-010 to 340-122-110 or as otherwise provided under applicable law.
- (4) The Director may determine that the investigation and cleanup of releases from petroleum underground storage tank systems which are exempted under ORS 466.710(1) through (10) inclusive, shall be conducted under 340-122-205 through 340-122-360, based upon the authority provided under ORS [466.540 to 466.590] 465.200 to 465.380.

#### 340-122-220 Initial Response

Upon suspicion or confirmation of a release or after a release from the UST system is identified in any manner, owners, permittees or responsible persons shall perform the following initial response actions within 24 hours [of the discovery of a release].

- (1) Report the following suspected or confirmed releases to the Department:
  - (a) All below-ground releases from the petroleum UST system [in any quantity];
  - (b) All above-ground releases to land from the petroleum UST system in excess of 42 gallons, or less than 42 gallons if the owner, permittee or responsible person is unable to contain or clean up the release within 24 hours; and
  - (c) All above-ground releases to water which result in a sheen on the water.
- (2) Take immediate action to prevent any further release of the regulated substance into the environment; and
- (3) Identify and mitigate fire, explosion, and vapor hazards.

4/2/91  
MODB.122

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION  
OF THE STATE OF OREGON

IN THE MATTER OF MODIFYING )  
OAR Chapter 340, ) STATEMENT OF NEED FOR RULES  
Divisions 12 and 150 )

Statutory Authority

ORS 466.705 through ORS 466.835 and ORS 466.895 through ORS 466.995 authorizes rule adoption for the purpose of regulating underground storage tanks. Specifically, Section 466.745 authorizes the Commission to adopt rules governing the standards for the installation of underground storage tanks, reporting of releases, permit requirements, requirements for maintaining records, procedures for distributors of regulated substances and sellers of underground storage tanks, decommissioning of underground storage tanks, procedures by which an owner or permittee may demonstrate financial responsibility, requirements for taking corrective action, civil penalties, and criminal penalties.

Section 466.720 authorizes the Commission and the Department to perform or cause to be performed any act necessary to obtain authorization of a state program for regulation of underground storage tanks under the provisions of Section 9004 of the Federal Resource Conservation and Recovery Act.

Section 466.730 allows the Commission to authorize the Department to enter into an agreement with an agency of the state or a local unit of government to administer all or part of the underground storage tank program.

Need for the Rules

The proposed rule modifications are needed to carry out the authority given to the Commission to adopt rules for regulation of Underground storage tanks and to obtain federal authorization of the state underground storage tank program.

### Principal Documents Relied Upon

Oregon Revised Statutes, ORS 466.705 through 466.835, 466.895 and 466.995.

40 CFR 280; 50 FR 28742, July 15, 1985; Amended by 50 FR 46612, November 8, 1985; Corrected by 51 FR 13497, April 21, 1986; Revised by 53 FR 37194, September 23, 1988, Effective December 22, 1988; Amended by 53 FR 43370, October 26, 1988; Corrected by 53 FR 51274, December 21, 1988; Amended by 54 FR 5452, February 3, 1989; Amended by 54 FR 47077, November 9, 1989; 55 FR 17753, April 27, 1990; 55 FR 18567, May 2, 1990; 55 FR 23738, June 12, 1990; 55 FR 46025, October 31, 1990; 56 FR 26, January 2, 1991.

The Comprehensive Environmental Response, Compensation and Liability Act of 1980.

Superfund Amendments and Reauthorization Act of 1986.

### Fiscal and Economic Impact

#### **Fiscal Impact**

There should not be any new or additional fiscal impact resulting from the proposed rule modifications.

#### **Small Business Impact**

Small businesses owning or operating underground storage tanks are presently regulated by federal regulations and the present state underground storage tank rules. The rules are modified for compliance with federal regulations, to relax certain requirements and to improve the utility and effectiveness of the rules for both the regulated community and the department. These rule modifications should not result in any new or additional small business impact beyond that already imposed by the federal regulations.

4/8/91  
NEED0426.91



# A CHANCE TO COMMENT ON...

Proposed Underground Storage Tank Rule Modifications

Hearing Date: May 28, 1991  
Comments Due: May 31, 1991

WHO IS AFFECTED: Persons who own or are in control of underground storage tanks (UST) used to store motor fuel. Persons who perform work on underground storage tanks.

BACKGROUND: Chapter 466, Oregon Law 1989 requires the Environmental Quality Commission to adopt rules establishing an underground storage tank program that will allow the Department to seek program authorization by EPA. In 1990 the Commission adopted technical standards and financial responsibility standards in preparation for seeking state authorization in 1991. It was anticipated that additional rules would need to be adopted.

WHAT IS PROPOSED: The Department of Environmental Quality is proposing to amend OAR 340, Division 12, Division 122, Division 150, Division 160, Division 162, and Division 163 .

WHAT ARE THE HIGHLIGHTS: The proposed rule modifications include changes to the federal regulations added since June 1990, relax certain rule requirements, improve rule effectiveness, allow licensing of UST Supervisors by reciprocity, and impose financial responsibility on UST owners and operators of 13-99 tanks.

HOW TO COMMENT: Copies of the complete proposed rule package may be obtained from: Underground Storage Tank Compliance Program, Department of Environmental Quality, 811 S.W. Sixth Avenue, Portland, OR 97204 or the regional office nearest you. For further information contact Larry Frost at (503) 229-5769.

A public hearing will be held before a hearings officer at:

1:30 p.m.  
May 28, 1991  
Department of Environmental Quality  
Conference Room 3A  
811 S.W. Sixth Avenue  
Portland, OR 97204

Oral and written comments will be accepted at the public hearing. Written comments may be sent to the DEQ, but must be received by no later than May 31, 1991.

H-1



811 S.W. 6th Avenue  
Portland, OR 97204

11/1/86

**FOR FURTHER INFORMATION:**

Contact the person or division identified in the public notice by calling 229-5696 in the Portland area. To avoid long distance charges from other parts of the state, call 1-800-452-4011.

WHAT IS THE  
NEXT STEP:

After public testimony has been received and evaluated, the proposed rules will be revised as appropriate and presented to the Environmental Quality Commission in July 1991. The Commission may adopt the Department's recommendation, amend the Department's recommendation, or take no action.

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION  
OF THE STATE OF OREGON

IN THE MATTER OF MODIFYING )  
OAR Chapter 340, ) LAND USE CONSISTENCY  
Divisions 12 and 150 )

The proposed rule modifications appear to affect land use and to be consistent with the Statewide Planning Goals.

With regard to Goal 6, the proposed rule modifications are consistent with the goal to maintain and improve the quality of the air, water, and land resources of the state. The rules does not appear to conflict with other goals.

Public comment on any land use issue involved is welcome and may be submitted in the same fashion as indicated for testimony in this notice.

It is requested that local, state, and federal agencies review the proposed action and comment on possible conflicts with their programs affecting land use with Statewide Planning Goals within their expertise and jurisdiction.

The Department of Environmental Quality intends to ask the Department of Land Conservation and Development to mediate any appropriate conflicts brought to our attention by local, state or federal authorities.

DESCRIPTION OF PROPOSED RULES:

The proposed rules include modifications to the UST technical standards, financial responsibility requirements, UST Service Provider and Supervisor licensing, UST classification of violations, and UST petroleum cleanup sections. These modifications are described below.

**Modifications to UST Rules to Match Federal Regulations:**

1. Adopt financial responsibility requirements for petroleum marketing firms with 13-99 tanks with a compliance date of August 1, 1991. This change assures that Oregon's UST rules are no less stringent than federal regulations.
2. Allow manual monitoring as the sole method of leak detection for tanks of 1,000 gallons or less. Through written interpretation EPA now allows use of manual monitoring for tanks 1,000 gallons or less even though 40 CFR 280 sets the limit at 550 gallons or less. The Department agrees with EPA's conclusion that manual monitoring is accurate for 1,000 gallon tanks.

**Other Modifications to UST Rules:**

1. Establish an UST permit fee waiver process. The proposed rule allows waiver of a permit application fee and an annual permit compliance fee at the discretion of the Director. The Department believes it may be appropriate to waive a fee in certain cases of financial hardship.
2. Allow monthly monitoring of releases for interstitial and Department approved leak detection systems. The rules adopted on June 6, 1990 were intended to require daily monitoring only for groundwater and soil vapor leak detection systems. This modified rule allows monthly monitoring in other cases.
3. Use the statements similar to "The following language shall be substituted in lieu of" rather than "Amend" when modifying federal regulations. The Department was advised by the Attorney General's office to modify the rule wording.
4. Require the owner and operator or licensed service provider to provide a completed decommissioning checklist to the Department within 30 days after tank closure. This requirement was overlooked during rule adoption on June 6, 1990. A checklist is presently required for installation and upgrading activities. The checklist provides the Department with information documenting that all applicable rules have been followed by the licensed service provider.

5. Insert a note within the decommissioning rules warning the owner and operator that liquids, sludges, and UST system components may require management as a hazardous waste. Encourage them to contact the Department prior to disposal of these items. Federal rule changes in testing procedures may classify these items as toxic and hazardous waste, primarily because of lead or benzene contamination. The Department believes it is appropriate to warn the owner and operator of regulations outside of the UST rules.

6. As part of the decommissioning process, require the owner and operator to obtain samples below the bottom of the tank and below any piping that contained product. The existing rules are not clear regarding sampling locations. This rule modification requires samples to be taken.

7. Require the owner and operator to provide 30 day notice before beginning upgrading of an existing UST, to provide 3 working days notice before starting work at the site, and to provide a completed installation checklist 30 days after completion of work. These reporting requirements are presently required for installation and decommissioning. Upgrading reporting requirements were overlooked during rule adoption on June 6, 1990. The Department should be notified during upgrades to allow inspection prior to backfilling.

8. Allow the Department to issue a temporary permit addendum to define special management conditions during tank decommissioning, operation, installation, upgrade, and retrofit such as management of solid waste, hazardous waste, contaminated water or discharge of air contaminants. The Department is presently using a permit addendum process to manage solid waste generated during a tank decommissioning. The addendum is issued in lieu of a solid waste permit and allows the owner and operator to place petroleum contaminated soil into a landfill, treat the soil on site, or treat the soil at another site. The Department wishes to extend the addendum concept to other types of contaminated waste streams. This rule would codify a policy that the Department is currently implementing.

#### Modifications to UST Service Provider and Supervisor Rules:

1. Require a checklist to be provided by the licensed Service Provider for all decommissioning and testing work. The present rules require the Service Provider to provide a checklist only for installation and upgrade work. Since the Department has limited staff to perform site inspections a signed checklist provides some assurance that work was properly completed. The checklist is needed for all decommissioning and testing work.

2. Require the licensed UST Supervisor to be present when key project tasks are being performed during decommissioning, tightness testing and cathodic protection testing. Under present rules the Supervisor must be present during key installation and retrofit project tasks. Such direction was not identified in the decommission and testing sections of

the rules. The Department believes oversight of the project by the Supervisor is required for proper installation of the UST system.

3. Insert a note within the licensing rules notifying the Service Provider and Supervisor that other licenses, such as a Construction Contractors license and a Monitoring Well Constructor license, may be required. The Department believes it is appropriate to alert the Service Provider and Supervisor of other state licensing requirements that may directly affect their ability to perform work on an UST system.

4. Modify the rule establishing fees for UST Supervisor study guides. Since the fee is fixed at \$10 a fee adjustment now requires a rule change. The rule is modified to allow the Department to charge for the cost of producing study guides, thus allowing a price adjustment when production costs increase.

5. Establish licensing reciprocity with other states. The Department is proposing to establish licensing reciprocity for Service Providers and Supervisors with other states in EPA Region 10 (Idaho, Washington, Alaska). Reciprocity makes more efficient use of limited state resources and simplifies licensing across state lines. The proposed rule allows reciprocity but does not require it.

6. Eliminate the requirement for the Department to confirm in writing a verbal approval authorizing a Soil Matrix Cleanup Service Provider to close an excavation. The present rules require the Department to provide written confirmation within 30 days after verbal approval to close an excavation at a site where cleanup of petroleum contaminated soil is being performed. The Department believes this written report is not necessary.

#### Proposed Changes to Enforcement Rules:

1. Classifies and adds violations by heating oil Service Providers and Supervisors to the Rules for Enforcement Procedure and Civil Penalties. Rules defining violations during soil cleanup at heating oil tanks had not previously been adopted.

2. Two Class One violations were changed to the lesser Class Two violation; working as a Service Provider without a license and working as an UST Supervisor without a license. The Department determined these violations were inconsistent with violation classifications used in other licensing programs.

3. Added as a Class Three violation the failure to report a suspected release from an underground storage tank. This infraction was overlooked during adoption of the enforcement rules.

**Proposed Changes to UST Petroleum Cleanup Rules:**

1. The proposed rule defines a "below-ground release" as any release to the subsurface of the land or to ground water that has concentrations which are reportable by TPH-HCID. The Department is recommending making the cleanup rules for leaking petroleum UST systems for consistency with the intent of the rules on numeric soil cleanup levels for motor fuel and heating oil. The numeric soil cleanup rules require identification of petroleum contaminated soil using the TPH-HCID test procedure. The current cleanup rules require reporting of petroleum discharges of any quantity. This rule change establishes a finite level of contamination that must be reported.
2. References to Oregon Revised Statutes have been corrected to match the new codification.

REQUEST FOR EQC ACTION

ENVIRONMENTAL  
QUALITY  
COMMISSION

Meeting Date: 4/26/91  
Agenda Item: D  
Division: HSW  
Section: HWRTA

**SUBJECT:**

Authorization for Rulemaking Hearing on Amendments to the Hazardous Waste Regulations.

**PURPOSE:**

Request for authorization to conduct a public hearing on amending Oregon Administrative Rules (OAR) pertaining to hazardous waste generator and treatment, storage, disposal and recycling facility (TSDRF) reporting requirements, and generator and TSDRF hazardous waste fees.

**ACTION REQUESTED:**

- Work Session Discussion
  - General Program Background
  - Potential Strategy, Policy, or Rules
  - Agenda Item  for Current Meeting
  - Other: (specify)

- Authorize Rulemaking Hearing
- Adopt Rules

Proposed Rule Amendments  
Rulemaking Statements  
Fiscal and Economic Impact Statement  
Public Notice

Attachment A  
Attachment B  
Attachment B  
Attachment C



811 SW Sixth Avenue  
Portland, OR 97204-1390  
(503) 229-5696





Meeting Date: 4/26/91  
Agenda Item: D  
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- Issue a Contested Case Order
- Approve a Stipulated Order
- Enter an Order  
    Proposed Order Attachment \_\_\_\_\_
  
- Approve Department Recommendation
- Variance Request Attachment \_\_\_\_\_
- Exception to Rule Attachment \_\_\_\_\_
- Informational Report Attachment \_\_\_\_\_
- Other: (specify) Attachment \_\_\_\_\_

DESCRIPTION OF REQUESTED ACTION:

Authorization is requested to conduct a public hearing on proposed regulatory amendments (Attachment A) to the Department of Environmental Quality's (Department) hazardous waste regulations, Chapter 340, Divisions 102, 104 and 105.

AUTHORITY/NEED FOR ACTION:

- Required by Statute: \_\_\_\_\_ Attachment \_\_\_\_\_  
    Enactment Date: \_\_\_\_\_
- Statutory Authority: ORS 466.020, 466.075,  
                                  466.195, 466.165 Attachment \_\_\_\_\_
- Pursuant to Rule: \_\_\_\_\_ Attachment \_\_\_\_\_
- Pursuant to Federal Law/Rule: \_\_\_\_\_ Attachment \_\_\_\_\_
  
- Attorney General's Regulatory Authority Attachment D  
    Evaluation
- Other:

Need For Action

- ▶ The Department's lack of accurate and comprehensive hazardous waste information results in an incomplete understanding of the generation and fate of hazardous waste in Oregon.

The Department, in cooperation with Ross and Associates, a contractor hired to conduct a hazardous waste reporting needs assessment (see Attachment G for Ross and Associates' Need's Assessment and Briefing Document), has identified significant deficiencies in the hazardous waste data reporting which warrant attention. The Department needs additional regulatory authority to collect some of the data (see Attachment D, Attorney General's Regulatory Authority Evaluation).

Meeting Date: 4/26/91

Agenda Item: D

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The Department's hazardous waste program is charged with regulating the generation and management of hazardous waste in Oregon. To date, the primary focus of the program has been on those wastes which are transported, under the federal manifest system, from large quantity (LQG) and small quantity (SQG) hazardous waste generators to treatment, storage, disposal and recycling facilities (TSDRF). Current Department reporting requirements do not generate adequate, accurate information about the status of hazardous waste generation and management in Oregon. The Department has a responsibility to provide the legislature and the citizens of Oregon with complete, current and accurate hazardous waste information on which to base decisions about the protection of our environment and quality of life. This cannot be done with the information currently collected from a limited segment of the regulated community.

- ▶ The EPA requires the Department to report certain information.

EPA reporting requirements necessitate that the Department develop a much more thorough and comprehensive understanding of all waste streams and the methods by which they are managed. EPA uses such information in its Biennial Report to the Congress, and in determining the need for locating new hazardous waste management facilities in the nation. These latter data are contained in the Capacity Assurance Plan which the Department must prepare and submit to EPA every two years.

- ▶ The Department and EPA current reporting requirements are redundant.

The current reporting requirements under the Department and EPA regulations are inconsistent and often redundant. TSDRFs and LQGs must report every two years on EPA Biennial Report forms and must also provide the Department with monthly, quarterly and/or annual reports of varying levels of complexity. Reporting by SQGs is currently limited to copies of the shipping documents (manifests) covering wastes transported from their property. In addition to mechanical difficulties in the organization and transcription of these data, the manifests provide no information on the way in which the wastes are managed and, therefore, provide no overall picture of waste generation and management at a given site. Beginning this year, users of large quantities of toxic substances must also report to the Department

under the provisions of OAR 340-135-070, Toxics Use Reduction and Hazardous Waste Reduction Regulations. In addition, to comply with federal reporting requirements, the Department has found it necessary to periodically undertake special surveys of the hazardous waste community. The Department wishes to establish a system of uniform and consistent annual reporting standards to meet all of these legitimate data needs and at the same time provide meaningful information to businesses as well as to the state and EPA. Such reporting would also be a precondition for changing the hazardous waste fee schedule to tie fee calculations to a hierarchy of hazardous waste management methods.

- ▶ The current hazardous waste fee schedule does not support Oregon's statutorily and regulatorily mandated hierarchy of preferred hazardous waste management methods.

The fee structure charges the same for all wastes, regardless of how they are managed. The Department and the Hazardous Waste Advisory Committee (HWAC) believe it both appropriate and effective to offer incentives that encourage hazardous waste management in accordance with the prescribed hierarchy, and to equitably distribute the fee.

- ▶ The hazardous waste fee structure is regressive.

The current fee schedule is inherently regressive, acting as a disincentive to waste minimization, because the per ton fee decreases as the total tonnage of hazardous waste increases. Furthermore, the current waste tonnage categories are so broad that there is no incentive to reduce waste within a category.

- ▶ Some LQGs and SQGs do not pay their fair share of fees.

Large quantity and small quantity hazardous waste generators must register with the Department (through the notification process). The wastes they generate and manage form a part of Oregon's overall environmental risk. Since generator fees are currently assessed only on wastes transported off site, those generators who recycle, or participate in waste exchanges, will pay if wastes are manifested off site. LQGs and SQGs who manage wastes on-site do not pay fees and, therefore, do not contribute their share to support Oregon's hazardous waste program.

Meeting Date: 4/26/91

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- ▶ The generator universe has not been entirely identified.

New generators will be identified and brought into the program through an improved reporting system. The size of the regulated universe is large (1,600 plus) and is growing. The Department can never have the field resources necessary to properly identify and monitor all possible generators. The improved reporting system will allow the Department to more easily track the activities of generators, through annual updates, and simplify generator reporting requirements, making it easier for generators to properly register with the Department. Improved reporting will also benefit field operations staff through access to better and more current information.

#### TIME CONSTRAINTS

##### X Time Constraints: (explain)

- ▶ Federal capacity assurance and biennial reports are due from the Department early in 1992 and 1993.

In order to meet this deadline, we must amend our hazardous waste reporting regulations to allow us to report on elements of hazardous waste management not previously required by the Department from the regulated community. Currently, the Department must rely on several different sources to obtain federally mandated data. There is no quality assurance check built into the system. To comply with the federal reporting mandate the Department must initiate the new hazardous waste reporting system before the end of the year so that the regulated community may generate and submit to the Department the data necessary for the Department to complete the federal reports for 1992 and 1993.

- ▶ Hazardous waste generator and TSDRF fees sunset.

The current hazardous waste fee schedule sunsets on June 30, 1991. A permanent TSDRF fee schedule and a temporary generator fee schedule are proposed, in accordance with recommendations of the HWAC (Attachment E). This is the first step in changing the entire hazardous waste fee structure to encourage waste management methods which reflect the hierarchy and include a broader base of generators. A permanent generator fee schedule will be in place by June 30, 1992.

Meeting Date: 4/26/91  
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**DEVELOPMENTAL BACKGROUND:**

<input checked="" type="checkbox"/> Advisory Committee Recommendation	Attachment <u>E</u>
<input type="checkbox"/> Hearing Officer's Report/Recommendations	Attachment <u>    </u>
<input type="checkbox"/> Response to Testimony/Comments	Attachment <u>    </u>
<input type="checkbox"/> Prior EQC Agenda Items: (list)	Attachment <u>    </u>
<input checked="" type="checkbox"/> Other Related Reports:	
List of Data Elements	Attachment <u>F</u>
Ross and Associates' Need's Assessment Briefing Document	Attachment <u>G</u>
<input type="checkbox"/> Supplemental Background Information:	Attachment <u>    </u>

**REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:**

Reporting

- ▶ Large Quantity Generators and Treatment, Storage, Disposal, and Recycling Facilities (TSDRFs) are expected to have less reporting burden overall, due to consolidation of reporting requirements.
- ▶ Small quantity generators will be expected to change from filing a quarterly report to an annual but more extensive report (see Attachment F for a complete list of data elements to be reported by LQGs, SQGs and TSDRF).
- ▶ Large Toxics Users (LTUs) who are not generators will submit an abbreviated annual report depicting toxics use reduction efforts.

Fees

- ▶ Registered hazardous waste generators who do not manifest waste off-site currently pay no fees: the proposed rulemaking would impose an annual re-registration fee of either \$350 or \$200 (depending upon generator size) on these regulated entities. The Department estimates that approximately 200 businesses not currently paying generation fees will be affected, and that most of these are not small businesses.
- ▶ Registered generators who manifest waste off-site, estimated to be about 700, currently pay generation fees ranging from \$230 to \$14,480 annually. The proposed rulemaking would reduce these fees by approximately

twenty percent for 1991. This regulated group would also be subject to the proposed annual re-registration fees of \$200 or \$350 annually, depending upon generator status. The combined net effect of these two changes varies with the level of generation fee assessed, and is shown in detail on page B-5, Attachment B. Since the Department plans to revise its fee structure for generators by the end of next year (see HWAC Report, Attachment E), the effects of the present rulemaking will be limited to the current year's billing.

- ▶ TSDRFs would not see any net change in current fees since the Department proposes to continue the fee schedule at the current levels.

**PROGRAM CONSIDERATIONS:**

The change to an annual report will:

- ▶ Provide the information necessary to enable the Department to move to a more equitable fee schedule which supports the hierarchy of waste management and acts as an incentive for waste reduction.
- ▶ Enhance the Department's ability to more effectively target technical assistance through a better characterization of the generator universe. This will especially benefit small quantity generators.
- ▶ Enable the Department to fully and correctly characterize hazardous waste reduction, generation, treatment, shipment, recycling, and disposal in Oregon. This knowledge is essential in complying with EPA's reporting requirements, and assuring that hazardous waste is being appropriately managed.
- ▶ Improve the Department's ability to identify new generators and to monitor their activities on a routine basis.
- ▶ Allows DEQ to better understand the interchange of hazardous waste between states and improves our ability to discuss interstate waste flow issues with other states through the collection of better data on a more routine basis.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

1. Reporting

a. Maintain current reporting requirements.

Selecting this alternative may have a profound effect on the regulated community. Unless the Department could come up with required EPA information, the EPA would require that the regulated community prepare the Biennial Report and the Department to prepare the Capacity Assurance Plan. Without having collected the required information over time, the regulated community would be hard pressed to complete the reports. Selecting this alternative would also necessitate continuing the Department's current inequitable fee system.

b. Voluntary reporting.

Much of the data (see Attachment F for list of data elements) is currently required by law to be submitted by each TSDRF, LQG, and to some extent SQGs. The need for mandatory reporting of some information from all regulated entities will be an ongoing requirement. We believe voluntary reporting and surveys are an appropriate tool for collecting some information beyond the mandatory requirements, however.

Data collected on a voluntary basis may not be consistent and reliable, but can give us a sense of the level of an issue. Using surveys, we can more easily decide the necessity for additional mandatory reporting requirements.

c. Modify rules to give the Department additional authority to ask for information.

The Department believes it is necessary to collect this additional information in order to improve our understanding of the hazardous waste picture in Oregon. Only through a detailed understanding of hazardous waste trends can the Department make good decisions about future management options. Also, EPA is currently in the process of expanding its reporting authority by the end of 1991.

2. Generator Fees

a. Retain the existing generator fee structure and extend the June 1991 expiration date.

This alternative could leave the Department with insufficient funds to operate the hazardous waste program and does not address the issue of equity and appropriateness of the fee.

- b. Immediately implement the two-part fee structure recommended by the HWAC which would collect:
  - (1) An annual flat fee (re-registration fee) from all generators of hazardous waste, independent of the method by which the waste is managed, and whether it is shipped off-site; and
  - (2) Establish a unit fee for each pound of waste generated, subject to a factorial multiplier which takes account of the management method employed for each waste stream, according to the recognized desirability of each method. For example, at a flat rate of \$.10 per pound, a pound of waste sent to a landfill might be charged at 1.5 times the base, or \$.15, while the same pound if recycled might be subject to .5 times the base, or \$.05.
- c. Implement a scheme as in 2b, but phase it in over two years, collecting the flat fee portion this year, but waiting until next year to change to the unitary system, since data required to support this system are not currently collected. As an interim measure, reduce the existing generator fees by the amount projected to be collected through the new annual flat re-registration fee.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

► Reporting.

The Department recommends adoption of alternative 1c in order to extend current authority through rulemaking procedure. This would allow the Department to collect data necessary to evaluate hazardous waste management in Oregon; prepare the required EPA reports; consolidate and simplify generator and TSDRF reporting requirements; and reduce the burden on the regulated community of having to complete several different reports on the same hazardous waste activity.



► Fees.

The Department recommends adoption of 2c as the only feasible way to achieve the ultimate goals of creating a fee system into which all generators contribute, and one which encourages responsible hazardous waste reduction/minimization and appropriate management of hazardous waste. This is also the option supported by the HWAC (see Attachment E).

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

► Reporting requirements.

The Department seeks to comply with all EPA reporting requirements, and at the same time minimize the reporting burden on the regulated public. The action recommended will allow the Department to obtain at one time the information it needs, rather than returning to the regulated public. In addition, the action will enable the Department to assess the hazardous waste management efforts in Oregon and develop the hazardous waste technical assistance program accordingly.

► Fees.

The Department must maintain and stabilize program funding. Currently, approximately fifty percent of the hazardous waste program funding comes from fees. Supporting the program through fees is in keeping with the policy of requiring those we regulate to pay for a portion of the program. In addition, the proposed changes to the fee structure will be more equitable and will be based on the hazardous waste management hierarchy mandated by the statutes and regulations.

ISSUES FOR COMMISSION TO RESOLVE:

1. Reporting

- a. Should DEQ expand its authority to collect information from the regulated community?
- b. Should reporting requirements be voluntary or mandatory?
- c. Should reporting be simplified and consolidated onto a single format to cover all hazardous waste handlers and toxics users in Oregon?

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d. Should Large Toxics Users be required to report in February rather than in September?

2. Fees

Is it appropriate to bring generators into the fee paying system who have not been in before?

INTENDED FOLLOWUP ACTIONS:

1. Conduct a public hearing on May 13, 1991.
2. Submit recommendations on rule adoption to the June 14, 1991 EQC meeting.

Approved:

Section:

Ray W. Brown

Division:

Stephanie Hallock

Director:

Bill Ham

Report Prepared By: Calaba/ Read/ Latham

Phone: 229-5913

Date Prepared: April 9, 1991

calaba:b  
HWPB\ZB1\ZB10435  
April 9, 1991

Before the Environmental Quality Commission of the State of Oregon:

In the matter of Amending OAR ) Proposed Amendments  
340, Divisions 102, 104, and 105)

Unless otherwise indicated, material enclosed in brackets [ ] is proposed to be deleted and material that is underlined is proposed to be adopted:

1. Rule 340-102-012 is proposed to be amended as follows:

Identification Number and Verification

340-102-012 In addition to the provisions of 40 CFR 262.12, as a matter of policy, the Department will accept EPA identification numbers already assigned and use a modified EPA registration form and identification number system (Dun and Bradstreet) for generators who register in the future. Effective January 1, 1991, and annually thereafter, hazardous waste generators and hazardous waste management and recycling facilities shall verify registration on a form provided by the Department.

2. Rule 340-102-040 is proposed to be amended as follows:

Recordkeeping

340-102-040 (1) The provisions of section (2) of this rule replace the requirements of 40 CFR 262.40(b).

(2) A generator must keep a copy of reports submitted to the Department [each Quarterly Report and Exception Report] for a period of at least three years from the due date of the report.

3. Rule 340-102-041 is proposed to be amended as follows:

[Quarterly] Generator Reporting

340-102-041 (1) The provisions of this rule replace the requirements of 40 CFR 262.41.

(2) A person producing at any time more than one (1) kilogram of acutely hazardous waste, a total of more than 100 kilograms [or more] of hazardous waste in a calendar month, or who accumulates on-site at any time a total of more than 1,000 kilograms of hazardous waste, shall submit Quarterly Reports through the period ending December 31, 1991 to the Department.

Attachment A  
Agenda Item: D  
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Effective January 1, 1992, and annually thereafter, a report shall be submitted to the Department, on a form provided by the Department, or by other means as agreed to by the Department, by persons defined as small quantity hazardous waste generators, large quantity hazardous waste generators, and/or hazardous waste recyclers. The report shall contain information required by the Department covering activities from the preceding calendar year. Reports shall be submitted no later than March 1, or at later date established by the Department. The annual report shall contain:

(a) Information required for purposes of notification of hazardous waste activity and/or annual verification of hazardous waste generator status;

(b) Information required for purposes of describing hazardous waste generator and waste management activity, including information pertaining to hazardous waste storage, treatment, disposal and recycling efforts and practices;

(c) Information required for the assessment of fees;

(d) Information required for describing toxics use reduction and hazardous waste reduction efforts and practices; and

(e) Information required for the Department's preparation and completion of the Biennial Report and Capacity Assurance Plan.

(3) Effective January 1, 1992, and annually thereafter, a report shall be submitted to the Department by persons defined as large toxics users who are not otherwise hazardous waste generators or hazardous waste management facilities. The report shall contain information required by the Department covering the activities from the preceding calendar year on a form provided by the Department. Reports shall be submitted no later than March 1, or at a later date established by the Department. The annual report shall contain:

(a) Information required for describing toxics use reduction as prescribed in the toxics use reduction and hazardous waste reduction regulations (OAR Chapter 340, Division 135).

[from that point forward, unless no additional hazardous waste is generated for a period of one year and the person requests in writing that the Department withdraw his/her generator registration.]

(4) Quarterly Reports are due within 45 days after the end of each calendar quarter for 1991, ending December 31, 1991:

(a)(A) The Quarterly Report shall include, but not be limited to the following information:

(i) A copy of the completed manifest or a listing of the information from each manifest for each shipment made during the calendar quarter.

(ii) A listing of all additional hazardous waste generated during the quarter that was sent off-site without a manifest or was used, reused or reclaimed on-site, on a form provided by the Department. The listing shall include, but not be limited to:

(I) The generator's name and address;

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- (II) The generator's U.S. EPA/DEQ Identification Number;
- (III) Identification of the calendar quarter in which the waste was generated;
- (IV) The type and quantity of each waste generated, by EPA code number; and
- (V) The disposition of each waste, including the identity of the receiving party for wastes shipped off-site and handling method; and
- (iii) If no hazardous waste was generated during the quarter, a statement to that effect, on a form provided by the Department.

(B) Reports submitted to the Department [The Quarterly Report] must be accompanied by the following certification signed and dated by the generator or his authorized representative:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this demonstration and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

[(3)](5) Any generator who is generating or managing hazardous waste on-site, including recycling, except closed-loop recycling, or receiving hazardous waste from off-site, [required to have a permit for the treatment, storage or disposal of hazardous waste on-site] must [also] submit an annual report covering those wastes and activities in accordance with the provisions of rule 340-104-075 and of 40 CFR, Part 266.

[(4) In addition to the requirements of sections (2) and (3) of this rule, on an annual basis, a person subject to the requirements of section (2) of this rule shall also submit, with the fourth quarter report, the following information:

(a) A description of the efforts undertaken during the calendar year to reduce the volume and toxicity of wastes generated and to recycle wastes, on a form provided by the Department;

(b) A description of the changes in volume and toxicity of wastes actually achieved during the calendar year, in comparison to previous years, to the extent such information is available, on a form provided by the Department.]

4. Rule 340-102-045 is proposed to be amended as follows:

#### Periodic Survey

340-102-045 [Beginning July 1, 1988,] H[h]azardous waste generators, on and off-site hazardous waste recyclers; treatment, storage, and disposal facilities; and large toxics users who

receive a survey form from the Department, concerning the waste generated, [and] waste handling practices, or toxics use should [shall either confirm their current notification status on the form or] complete the form[.] and return it [The form shall be returned] to the Department[, within 30 days of receipt] as prescribed by the Department.

5. Rule 340-102-065 is proposed to be amended as follows:

**Hazardous Waste Generator Fees**

340-102-065 (1) Each person generating hazardous waste shall be subject to an annual fee based on the weight of hazardous waste generated during the previous calendar year. The ~~billing~~ billing cycle shall be the calendar year [state's fiscal year (July 1 through June 30)] and fees shall be paid annually within 30 days of the invoice date. A late charge [in the amount of \$200] equal to ten percent of the fee due shall be paid if the fees are not postmarked [received] by the due date on the invoice. An additional [\$200] late charge of fifteen percent shall also be paid each 90 days that the invoice remains unpaid. Invoices 90 days or more overdue shall also be increased by twenty [20] percent and referred to the state Department of Revenue for collection.

(2) For the purpose of determining appropriate fees, each hazardous waste generator shall be assigned to a category in Table 1 of this Division based upon the amount of hazardous waste generated in the calendar year identified in section (1) of this rule except as otherwise provided in section (5) of this rule.

Table 1

Hazardous Waste  
Generation Rate  
(Metric Tons/Year)

Fee

<1.....	[230]	<u>180</u>
1 but <3.....	[685]	<u>540</u>
3 but <14.....	[1,250]	<u>1,000</u>
14 but <28.....	[2,000]	<u>1,600</u>
28 but <142.....	[4,500]	<u>3,600</u>
142 but <284.....	[10,200]	<u>8,150</u>
<284.....	[14,480]	<u>11,600</u>

(3) For the purpose of determining appropriate fees, hazardous waste shall be included in the quantity determinations required by section (1) of this rule as follows:

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(a) Except as provided in subsection (b) of this section, all quantities of "listed" and "characteristic" hazardous waste shall be counted that are:

(A) Accumulated on-site for any period of time prior to subsequent management;

(B) Packaged and transported off-site;

(C) Placed directly in a regulated on-site treatment or disposal unit; or

(D) Generated as still bottoms or sludges and removed from product storage tanks.

(b) Hazardous wastes shall not be counted that are:

(A) Specifically excluded from regulation under 40 CFR 261.4, 261.5, or 261.6;

(B) Continuously reclaimed on-site without storage prior to reclamation. (Note: Any residues resulting from the reclamation process, as well as spent filter materials, are to be counted);

(C) Managed in an elementary neutralization unit, a totally enclosed treatment unit, or an exempt wastewater treatment unit;

(D) Discharged directly under a permit or authorization to a publicly-owned wastewater treatment works, without first being stored or accumulated. (Note: Any such discharge must be in compliance with applicable federal, state and local water quality regulations); or

(E) Already counted once during the calendar month, prior to being recycled.

(4) In order to determine annual hazardous waste generation rates, the Department may use generator [quarterly] reports required by rule 340-102-041; treatment, storage and disposal reports required by rule 340-104-075; information derived from manifests required by 40 CFR 262.20, and any other relevant information. For wastes reported in the units of measure other than metric tons, the Department will use the following conversion factors: 1.0 metric tons = 1,000 kg = 2,200 lbs. = 35.25 cubic feet = 264 gallons = 1.10 tons (English) = 4.80 drums (55 gallons).

(5) Owners and operators of hazardous waste treatment, storage and disposal facilities shall not be subject to the fees required by section (1) of this rule for any wastes generated as a result of storing, treating or disposing of wastes upon which an annual hazardous waste generation fee has already been paid. Any other wastes generated by owners and operators of treatment, storage and disposal facilities are subject to the fees required by section (1) of this rule.

(6) All fee shall be made payable to the Department of Environmental Quality.

(7) The fee schedule in section (2) of this rule shall expire on June 30, 199[1]2.

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(8) Effective January 1, 1991, each hazardous waste generator shall be subject to an annual hazardous waste activity re-registration verification fee, upon billing by the Department, as follows:

(a) Large Quantity Generator: \$350.

(b) Small Quantity Generator: \$200.

(c) Conditionally Exempt Small Quantity Generator: 0

6. Rule 340-104-075 is proposed to be amended as follows:

[Periodic] Facility R[er]eporting

340-104-075 (1) The provisions of this rule replace the requirements of 40 CFR 264.75 and 40 CFR 265.75.

(2) Through December 31, 1991, [T]he owner or operator of a hazardous waste management facility or recycling facility [of a hazardous waste management facility or recycling facility] must prepare and submit an operating report to the Department on a form provided by the Department. Disposal facility reports are due monthly within 45 days after the end of each calendar month, and treatment and storage facility reports are due within 45 days after the end of each calendar quarter. The report must cover facility activities during the previous month or quarter, as appropriate, and must include, but not be limited to the following information:

(a) The EPA identification number, name, and address of the facility;

(b) The period covered by the report;

(c) For off-site facilities, the EPA identification number of each hazardous waste generator from which the facility received a hazardous waste during the period; for imported shipments, the report must give the name and address of the foreign generator;

(d) A description and the quantity of each hazardous waste the facility received during the period and the final handling method by EPA handling code for each waste. For off-site facilities, this information must be listed by EPA identification number of each generator;

(e) The method of treatment, storage, or disposal for each hazardous waste;

(f) The most recent closure cost estimate under 40 CFR 264.142, or 40 CFR 265.142, as appropriate, and, for disposal facilities, the most recent post-closure cost estimate under 40 CFR 264.144, or 40 CFR 265.144, as appropriate;

(g) A certification signed by the owner or operator of the facility or his authorized representative as required by 40 CFR 270.11(b).



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(h) Copies of manifests or other shipping documents for all hazardous wastes received or a listing of the information from each manifest or shipping document; and

(i) Monitoring data under 40 CFR 265.94(a)(2)(ii) and (iii), and (b)(2), where required.

(3) Effective January 1, 1992, and annually thereafter, a report shall be submitted to the Department on a form provided by the Department, or by other means agreed to by the Department, by hazardous waste treatment, storage, disposal facilities, and off-site hazardous waste recycling and non-RCRA permitted hazardous waste management or recycling facilities. The report shall contain information required by the Department covering the activities from the preceding calendar year. Reports shall be submitted no later than March 1, or at a later date established by the Department. The annual report shall contain:

(a) Information required for purposes of notification of hazardous waste activity and/or annual verification of hazardous waste generator or management or recycling facility status;

(b) Information required for purposes of describing hazardous waste management and facility information, including information pertaining to storage, treatment, disposal, and recycling of hazardous waste received, or generated on-site, and any hazardous waste reduction efforts and practices;

(c) Information required for the assessment of fees;

(d) Information required for describing toxics use reduction and hazardous waste reduction; and

(e) Information required for the Department's preparation and completion of the Biennial Report and Capacity Assurance Plan.

(f) The most recent closure cost estimate under 40 CFR 264.142, or 40 CFR 265.142, as appropriate, and, for disposal facilities, the most recent post-closure cost estimate under 40 CFR 264.144, or 40 CFR 265.144, as appropriate;

(g) A certification signed by the owner or operator of the facility or his authorized representative as required by 40 CFR 270.11(b); and

(h) Monitoring data under 40 CFR 265.94(a)(2)(ii) and (iii), and (b)(2), where required.

7. Rule 340-105-110 is proposed to be amended as follows:

Facility p[P]ermit fees.

340-105-110 (1) Each person required to have a hazardous waste storage, treatment or disposal permit (management facility permit) shall be subject to a three-part fee consisting of a filing fee, an application processing fee and an annual compliance determination fee as listed in rule 340-105-113. The amount equal to the filing fee, application processing fee and the first year's annual compliance determination fee shall be submitted as a

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required part of any application for a new permit. The amount equal to the filing fee and application processing fee shall be submitted as a required part of any application for renewal or modification of an existing permit.

(2) As used in this rule, the following definitions shall apply:

(a) The term management facility includes[,but is not limited to]:

- (A) Hazardous waste storage facility;
- (B) Hazardous waste treatment or recycling facility; and
- (C) Hazardous waste disposal facility.

(b) The term hazardous wastes includes any residue or hazardous wastes as defined in Division 101 or 40 CFR Part 261 handled under the authority of a management facility permit.

(c) The term license and permit shall mean the same thing and will be referred to in this rule as permit.

(3) The annual compliance determination fee shall be paid for each year a management facility is in operation and, in the case of a disposal facility, for each year that post-closure care is required. The fee period shall be the calendar year [state's fiscal year (July 1 thorough June 30)] and shall be paid annually within 30 days of the invoice date. A late charge in the amount of \$200 shall be paid if the fees are not received by the due date on the invoice. An additional \$200 late charge shall also be paid each 90 days that the invoice remains unpaid. Invoices 90 days or more overdue shall also be increased by 20 percent and referred to the state Department of Revenue for collection. Any annual compliance determination fee submitted as part of an application for a new permit shall apply to the calendar year the permitted management facility is put into operation. For the first year's operation, the full fee shall apply if the management facility is placed into operation on or before April 1. Any new management facility placed into operation after April 1 shall not owe a compliance determination fee until the invoice due date of the following year. The Director may alter the due date for the annual compliance determination fee upon receipt of a justifiable request from a permittee.

(4) For the purpose of determining appropriate fees, each management facility shall be assigned to a category in rule 340-105-113 based upon the amount of hazardous waste received and upon the complexity of each management facility. Each management facility which falls into more than one category shall pay whichever fee is higher. The Department shall assign a storage and treatment facility to a category on the basis of design capacity of the facility. The Department shall assign a new disposal facility to a category on the basis of estimated annual cubic feet of hazardous waste to be received and an existing disposal facility on the basis of average annual cubic feet of hazardous waste received during the previous three calendar years.

(5) Where more than one management facility exists on a single site, in addition to the compliance determination fee required by sections (3) and (4) of this rule, a flat fee of \$250 shall be assessed for each additional management facility.

(6) Modifications of existing, unexpired permits which are instituted by the Department due to changing conditions or standards, receipt of additional information or any other reason pursuant to applicable statutes and do not require re-filing or review of an application or plans and specifications shall not require submission of the filing fee or the application processing fee.

(7) Upon the Department accepting an application for filing, the filing fee shall be nonrefundable.

(8) The application processing fee, except for disposal permits, may be refunded in whole or in part when submitted with an application if either of the following conditions exist:

(a) The Department determines that no permit will be required.

(b) The applicant withdraws the application before the Department has approved or denied the application.

(9) The annual compliance determination fee may be refunded in whole or in part when submitted with a new permit application if either of the following conditions exist:

(a) The Department denies the application.

(b) The permittee does not proceed to construct and operate the permitted facility.

(10) All fees shall be made payable to the Department of Environmental Quality.

[(11) The fee schedule in rule 340-105-113(3) shall expire on June 30, 1991.]

8. Rule 340-105-113 is proposed to amended as follows:

#### Fee Schedule

340-105-113 (1) Filing Fee. A filing fee of \$50 shall accompany each application for issuance, reissuance or modification of a hazardous waste management facility or PCB treatment or disposal facility permit. This fee is nonrefundable and is in addition to any application processing fee or annual compliance determination fee which might be imposed.

(2) Application Processing Fee. An application processing fee shall be submitted with each hazardous waste management facility or PCB treatment or disposal facility permit application or Authorization to Proceed request, if such a request is required under OAR 340-120-005. The intent of the application processing fee is to cover the Department's costs in investigating and processing the application. For all applications, any portion of the application processing fee which exceeds the Department's

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expenses in reviewing and processing the application shall be refunded to the applicant. In the case of permit reissuance, a fee is not initially required with the application. Within sixty days of receipt of the application, the Department will estimate its costs to reissue the permit and will bill the applicant for those costs, up to the amount specified in subsection (2)(b) of this rule. The application will be considered incomplete and processing will not proceed, until the fee is paid, or until other arrangements have been made with the Department. In the event that the Department underestimates its costs, the applicant will be assessed a supplemental fee. The permit shall not be reissued until all required fees are paid. The total fees paid shall not exceed the amount specified in subsection (2)(b) of this rule. The amount of the fee shall depend on the type of facility and the required action as follows:

(a) A new permit:	
(A) Storage facility . . . . .	\$ 70,000
(B) Treatment facility . . . . .	70,000
(C) Disposal facility . . . . .	70,000
(D) Disposal facility - <u>post closure</u> . . . . .	70,000
(b) Permit Reissuance:	
(A) Storage facility . . . . .	50,000
(B) Treatment facility . . . . .	50,000
(C) Disposal facility . . . . .	50,000
(D) Disposal facility - <u>post closure</u> . . . . .	50,000
(c) Permit Modification[- major:]	
(A) Storage facility . . . . .	No Fee
(B) Treatment facility . . . . .	No Fee
(C) Disposal facility . . . . .	No Fee
(D) Disposal facility - <u>post closure</u> . . . . .	No Fee
[(d) Permit Modification- minor:	
All Categories . . . . .	No Fee]

(3) Annual Compliance Determination Fee. Except as provided in rule 340-105-110(5), in any case where a facility fits into more than one category, the permittee shall pay only the highest fee as follows:

Fee

(a) Storage facility:	
(A) 5-55 gallon drums or 250 gallons total or 2,000 pounds . . . . .	1,940

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- (B) 5 to 250 - 55 gallon drums or 250 to 10,000 gallons total or 2,000 to 80,000 pounds . . . . . 3,420
- (C) >250 - 55 gallon drums or >10,000 gallons total or >80,000 pounds . . . . . 7,980
- (D) Closure . . . . . 3,990
- (b) Treatment Facility:
  - (A) <[, ]25 gallons/hour or 50,000 gallons/day or 6,000 pounds/day . . . . . 1,940
  - (B) 25-200 gallons/hour or 50,000 to 500,000 gallons/day or 6,000 to 60,000 pounds/day. . . . . 3,420
  - (C) >200 gallons/hour or >500,000 gallons/day or >60,000 pounds/day. . . . . 7,980
  - (D) Closure. . . . . 7,980
- (c) Disposal Facility:
  - (A) <750,000 cubic feet/year [of]or <37,500 tons/year. . . . . 100,000
  - (B) 750,000 to 2,500,000 cubic feet/year or 37,500 to 125,000 tons/year . . . . . 150,000
  - (C) >2,500,000 cubic feet/year or >125,000 tons/year . . . . . 200,000
  - (D) Closure. . . . . 13,680
- (d) Disposal Facility - Post Closure:
  - All categories . . . . . 13,680

9. Rule 340-105-120 is proposed to be amended as follows:

**Hazardous Waste Management Fee**

340-105-120(1) Beginning July 1, 1987, every person who operates a facility for the purpose of disposing of hazardous waste or polychlorinated biphenyl (PCB) that is subject to interim status or a permit [used] issued under ORS Chapter 466 shall pay a monthly Hazardous Substances Remedial Action Fee by the 45th day after the last day of each month in the amount authorized by statute. [ORS 465.375 establishes a fee of \$20 per ton for all waste brought into the facility for treatment by incinerator or for disposal by landfill at the facility. For purposes of calculating the Hazardous Substances Remedial Action Fee required by this section, the facility operator does not need to include hazardous waste resulting from on-site treatment processes used to render a waste less hazardous or reduced in volume prior to land disposal].

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(2) The term "hazardous waste" means any hazardous waste as defined by rules adopted by the Environmental Quality Commission and includes any hazardous waste as defined in OAR 340 - Division 100 or 101 or 40 CFR Part 261 handled under the authority of interim status or a management facility permit.

(3) The term PCB shall have the meaning given to it in OAR 340 -Division 110.

(4) The term "ton" means 2000 pounds and means the weight of waste in tons as determined at the time of receipt at a hazardous waste or PCB management facility. The term "ton" shall include the weight of any containers treated or disposed of along with the wastes being held by the container.

(5) In the case of a fraction of a ton, the fee imposed by section (1) of this section shall be the same fraction multiplied by the amount of such fee imposed on a whole ton.

(6) Every person subject to the fee requirement of section (1) of this rule shall record actual weight for all waste received for treatment by incinerator or disposal by landfilling in tons at the time of receipt. Beginning January 1, 1986, the scale shall be licensed in accordance with ORS Chapter 618 by the Weights and Measures Division of the Department of Agriculture.

(7) Accompanying each monthly payment shall be a detailed record identifying the basis for calculating the fee that is keyed to the monthly waste receipt information report required by OAR 340-104-075(2)(c) and (2)(d).

(8) All fees shall be made payable to the Department of Environmental Quality. All fees received by the Department of Environmental Quality shall be paid into the State Treasury and credited to the Hazardous Substances Remedial Action Fund.

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BEFORE THE ENVIRONMENTAL QUALITY COMMISSION  
OF THE STATE OF OREGON

IN THE MATTER OF AMENDING	)	STATEMENT OF NEED FOR
CHAPTER 340, DIVISIONS	)	RULEMAKING
102, 104, AND 105	)	

STATUTORY AUTHORITY

1. ORS 466.020 requires the Commission to:
  - (a) Adopt rules to establish minimum requirements for the treatment, storage, and disposal of hazardous wastes, minimum requirements for operation, maintenance, monitoring, reporting and supervision of treatment, storage and disposal sites, and requirements and procedures for selection of such sites.
  - (b) Adopt rules relating to reporting by generators of hazardous wastes concerning type, amount and disposition of hazardous waste and waste minimization activities.
2. ORS 466.075 requires the Commission to:
  - (a) Adopt rules requiring hazardous waste generators to identify themselves, list the location and general characteristics of their activity and name the hazardous wastes generated.
  - (b) Adopt rules requiring generators to keep records identifying quantities of hazardous waste, the constituents thereof and their disposition and waste minimization activities.
  - (c) Adopt rules requiring generators to submit reports to the department setting out quantities of hazardous waste generated during a given time period, the disposition of all such waste and waste minimization activities.
3. ORS 466.165 allows the Department to require an annual fee of every generator and permittee. The fee amount is determined by the Commission to be adequate to carry on the monitoring,

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inspection and surveillance program and to cover related administrative costs.

4. ORS 466.195 requires any person who generates, stores, treats, transports, disposes of or otherwise handles or has handled hazardous wastes, to furnish information relating to such wastes to any officer, employe or representative of the Department.

NEED FOR THE RULES:

The Department must address generator and TSDRF fees that will sunset June 30, 1991. The Department proposes to establish temporary hazardous waste generator fees, retain the current TSDRF fees, and intends to adopt permanent generator fees later this year, which will become effective in 1992. In addition, the Department is proposing to simplify and consolidate several generator and TSDRF reporting requirements onto one reporting form. Currently, generators, TSDRFs and toxics users must report waste management activities and capacity assurance information on different forms. This results in many hazardous waste handlers having to report the same information on different forms.

PRINCIPAL DOCUMENTS RELIED UPON:

Oregon Administrative Rules, Chapter 340, Divisions 102, 104 and 105.

FISCAL AND ECONOMIC IMPACT

Proposed Changes to Fees.

- ▶ Impact on TSDRFs.

There is no fiscal impact on this regulated group, since the effect of the proposed rulemaking is to make permanent the same fees in effect for the past two years.

- ▶ Impact on hazardous waste generators.

Registered generators who do not manifest waste off-site currently pay no fees: the proposed rulemaking would impose an annual re-registration fee of either \$350 or \$200 (depending upon generator size) on these regulated entities. The Department estimates that approximately 200 businesses not currently paying generation fees will be affected, and that most of these are not small businesses.



Registered generators who manifest waste off-site, a regulated group numbering about 700, currently pay generation fees ranging from \$230 to \$14,480 annually. The proposed rulemaking would reduce these fees by approximately twenty percent for 1991. This regulated group would also be subject to the proposed annual re-registration fees of \$200 or \$350 annually, depending upon generator status. The combined net effect of these two changes varies with the level of generation fee assessed, and is shown in detail on Chart A. The Department does not know how many small businesses are included in the regulated group, but believes that more large businesses will be affected than small businesses. Since the Department plans to revise its fee structure for generators by the end of the year, the effects of the present rulemaking will be limited to the current year's billing.

#### Proposed changes to reporting.

The fiscal impact of the reporting requirements will vary. LQGs will probably experience a smaller burden due to the amalgamation of the several reports they must now complete. SQGs currently must submit a quarterly report, but will be going to an annual, more extensive report. Large toxics users (LTU)s will have essentially the same reporting burden. Most of the data for these reports are primarily available from records required to be kept on site by the regulated community.

► Impact on TSDRFs.

There will be little fiscal impact on TSDRFs. They are currently required to report either monthly or quarterly, depending on facility type, and are also required to complete the federal Biennial Report. In addition, they may have to comply with the toxics use reduction reporting requirements, and are currently submitting much identical information on different reports many times throughout the year. The proposed annual combined data form will eliminate much of that redundancy.

► Impact on Large Quantity Hazardous Waste Generators (LQGs).

LQGs are currently submitting quarterly reports. The reports consist of copies of shipping manifests. No data is submitted concerning on-site management of

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waste. LQGs are required to complete the federal Biennial Report, and may have to comply with the toxics reduction reporting requirements. Since there is considerable duplication of data in the reports LQGs are currently submitting, it is expected that there will be little fiscal impact on them.

- ▶ Impact on Small Quantity Hazardous Waste Generators (SQGs).

Like LQGs, SQGs currently submit quarterly reports consisting of manifests. SQGs are not required to complete the federal Biennial Report, but may have to comply with the toxics use reduction reporting requirements. Although duplication of data reported will be eliminated, SQGs will have more data to report than is currently required in the quarterly reports.

- ▶ Impact on Large Toxics Users (LTU)s.

LTUs who are not LQGs or SQGs will not have a significant fiscal impact from the new reporting requirements, since they will essentially remain the same.

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Chart A  
Fiscal Impact of Proposed Fees

Fee Class (Tonnage Generated)	Number In Class*	Current Generation Fee	Proposed Generation Fee	Proposed Re-Registr. Fee	Proposed Total Fee	Increase or (Decrease)
<1 mt.	223	\$230	\$180	\$200	\$380	\$150
>1<3 mt.	223	\$685	\$540	\$200	\$740	\$55
>3<14 mt.	131	\$1,250	\$1,000	\$200	\$1,200	(\$50)
>14<28 mt.	34	\$2,000	\$1,600	\$350	\$1,950	(\$50)
>28<142 mt.	35	\$4,500	\$3,600	\$350	\$3,950	(\$550)
>142<284 mt.	3	\$10,200	\$8,150	\$350	\$8,500	(\$1,700)
<284 mt.	13	\$14,480	\$11,600	\$350	\$11,950	(\$2,530)

\* Based on DEQ billing in 1990 for wastes generated in 1989.

*Oregon Department of Environmental Quality*

# **A CHANCE TO COMMENT ON...**

**PROPOSED AMENDMENTS TO THE DEPARTMENT'S  
HAZARDOUS WASTE REPORTING AND FEE ASSESSMENT REGULATIONS**

**Hearing Date: May 13, 1991  
Comments Due: May 24, 1991**

**WHO IS  
AFFECTED:**

Persons who generate, store, treat, dispose and reduce hazardous wastes, and persons who are large toxics users.

**WHAT IS  
PROPOSED:**

The Department of Environmental Quality (DEQ) proposes to amend Chapter 340, Divisions 102, 104 and 105 dealing with hazardous waste generator and treatment, storage, disposal and recycling facility reporting and fees.

**WHAT ARE THE  
HIGHLIGHTS:**

- o Consolidate current Department quarterly report, federal Biennial Report, Capacity Assurance Plan, toxics reduction and waste minimization report into a single report.
- o Change reporting frequency from quarterly to annually.
- o Initiate hazardous waste generator annual re-registration status verification requirement.
- o Reduce hazardous waste generator fees; initiate generator re-registration verification fees for Large Quantity and Small Quantity generators; sunset generator compliance fees on June 30, 1992; and maintain current TSDF fees.

**HOW TO  
COMMENT:**

Copies of the proposed rule package may be obtained from the Hazardous and Solid Waste Division, 811 S.W. Sixth Avenue, Portland, Oregon 97204. Oral and written comments will be accepted at the public hearing:

9:00 a.m. and continuing until  
all testimony is completed  
Monday, May 13, 1991,  
DEQ Conference Room 3A  
811 S.W. Sixth Avenue  
Portland, OR 97204

(over)

C-1



811 S.W. 6th Avenue  
Portland, OR 97204

11/1/86

**FOR FURTHER INFORMATION:**

Contact the person or division identified in the public notice by calling 229-5696 in the Portland area. To avoid long distance charges from other parts of the state, call 1-800-452-4011.

Attachment C  
Agenda Item: D  
4/26/91 EQC Meeting

Written comments should be sent to Dave Rozell, DEQ Hazardous and Solid Division, 811 S.W. Sixth Ave., Portland, OR 97204. Comments must be received by 5:00 p.m., May 21, 1991. For further information, contact Gary Calaba or Dave Rozell, (503) 229-5913, or toll-free within Oregon, 1-800-452-4011.

**WHAT IS THE  
NEXT STEP:**

After the public hearing, DEQ will evaluate the comments, prepare a response to the comments, and make a recommendation to the Environmental Quality Commission in June 1991. The Commission may adopt the Amendments as proposed, adopt modified amendments as a result of the testimony received, or decline to adopt any amendments.

G:\HWPD\ZB1\ZB10435

DAVE FROHNMAYER  
ATTORNEY GENERAL



Attachment D  
Agenda Item: D  
4/26/91 EQC Meeting  
JACK L. LANDAU  
DEPUTY ATTORNEY GENERAL

DEPARTMENT OF JUSTICE

PORTLAND OFFICE  
1515 SW 5th Avenue  
Suite 410  
Portland, Oregon 97201  
Telephone: (503) 229-5725  
FAX: (503) 229-5120

MEMORANDUM

RECEIVED  
MAR 18 1991

Hazardous & Solid Waste Division  
Department of Environmental Quality

DATE: March 15, 1991

TO: Roy Brower *LL*  
Hazardous and Solid Waste  
Department of Environmental  
Quality

FROM: Larry Edelman  
Assistant Attorney General

SUBJECT: Hazardous Waste Reporting

I reviewed the memorandum from Ross & Associates regarding reporting of hazardous waste information.

In my view, DEQ should promulgate a new hazardous waste reporting rule if it wishes to obtain the extensive data elements set out in the memorandum. Our existing regulations do not appear to provide broad enough authority, alone or in combination, to require all of these elements. Some of the existing regulatory authority, in fact, applies only to specific entities e.g., OAR 340-135-070(3) applies only to large quantity generators and large toxics users. Even for those entities covered, some of the data elements, such as performance goals, can not be required under the existing statute or the regulations.

Currently, DEQ rules provide for quarterly reporting by generators and a periodic survey. Those who report quarterly need only certify their notification status on the survey. The surveys are not annual. OAR 340-012-045; DEQ Response to Comments Summary (7/8/88). If DEQ wishes to go from quarterly reporting to annual reporting a rule change is necessary.

Roy Brower  
March 15, 1991  
Page Two

The current generator fee rules (OAR 340-012-065) do not provide for reporting of information. DEQ determines the fees due from quarterly reports, manifests, and other relevant information. This rule does not expressly authorize collection of other data elements, rather it relies on other reporting requirements.

As the Ross memorandum points out, DEQ has broad statutory authority to require reporting of information related to hazardous waste activities. It does not appear to me, however, that our existing regulations are adequate to support a major new reporting form encompassing the myriad of data elements identified in the memorandum.

Please contact me if you wish to discuss this further. It may be that I don't yet fully understand what DEQ wishes to do.

#6309H/aa

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: March 19, 1991

TO: Hazardous Waste Advisory Committee Members

FROM: Roy W. Brower, Manager, Hazardous Waste Reduction and  
Technical Assistance

SUBJECT: Fee Committee Recommendations

Attached are the final recommendations of the Hazardous Waste Advisory Committee to DEQ on hazardous waste fees. The draft recommendations were changed slightly to clarify the TSD fee recommendation (#7). The recommendations have been forwarded to Fred Hansen for his review.

CURRENT HAZARDOUS WASTE RULEMAKING

At the April 26, Environmental Quality Commission (EQC) meeting, we will be seeking hearing authorization for the first phase of rule changes to implement the new fee system and the recommendations of the advisory committee. Specifically, we plan to seek the following regulatory changes:

1. Extend the sunset date on the current generator fees for one year and reduce the fee schedule by 20 percent. This will allow us to conduct our annual generator billing under the current system one more time (in 1991).
2. Establish an annual generator registration fee for Large Quantity Generators (LQGs) and Small Quantity Generators (SQGs) of \$350 and \$200 respectively. This is the first step in phasing in the new fee system.
3. Require LQGs, SQGs and TSDs to annually verify their registration information and status. This will allow DEQ to more accurately characterize the universe of generators/facilities and will improve our ability to deliver technical assistance to a selected business/industry audience.
4. Establish the TSD fees as permanent by elimination of the current sunset.
5. Modify the DEQ reporting cycle to require an annual report and phase out the current quarterly report requirement. (See more in depth discussion of forms development and reporting cycles later in the memorandum.)



Memo to: Hazardous Waste Advisory Committee Members  
March 15, 1991  
Page 2

6. Clarify DEQs authority to collect information necessary to institute the new fee system, meet EPA reporting requirements and provide general facility information to improve notification system. (See more in depth discussion of forms development later in the memorandum.)

We are delaying implementation of changes to the Conditionally Exempt Generator (CEG) program (i.e. registration and fee program) until later in the calendar year, once we have determined the viability of resources. (See discussion of Senate Bill 241 later in the memorandum.) We are also deferring a rule on corrective action fees until after we have the new generator fee system in place.

Our hope is to have a public hearing in May and to pass a final rule at the June EQC meeting. We will keep you informed of our progress. (If any of you are no longer interested in the process, call Joyce Thomas at 229-5913 to have your name removed from the mailing list.)

#### NEXT STEPS TO IMPLEMENT FEE SYSTEM

We have or will have three major projects going on simultaneously that affect implementation of the HWAC recommendations. They are:

- development of new, consolidated reporting forms;
- development of the new generator fee rule; and
- major computer system modification to accommodate the new fee system, reporting forms and billing procedures.

As many of you know we have contracted with Ross and Associates to help us devise and design a clear, comprehensive and consolidated reporting form package for SQGs, LQGs, TSDs, and Large Toxics Users (LTUs). While we had hoped to have forms ready by the middle of this year, we are now planning on introducing the forms by the end of the year to be used for 1991 reporting. (We still plan to require quarterly reporting during 1991 as a transitional year to the new annual reporting cycle.)

Draft forms will be ready this summer. We plan to conduct a "pre-test" with willing business/industry participants as a way to refine and improve the forms. (If you are interested in participating or know of someone in your company or organization that would like to participate, contact Norman Read of my staff at 229-5913.) We also plan to introduce the

Memo to: Hazardous Waste Advisory Committee Members  
March 15, 1991  
Page 3

final forms in a series of workshops around the state in September/October.

We are attempting to consolidate many of the current hazardous waste and toxics use reduction reporting requirements into a consolidated form package. Our new forms are intended to replace the DEQ quarterly report, EPA's Biennial Report, EPA's capacity assurance reporting requirements, and DEQ's toxics use reduction reporting. The new reporting forms will also improve our ability to notify reporters about workshops, mailings, regulatory changes and technical assistance opportunities. Once the rule is drafted, we will send copies to the HWAC mailing list.

Shortly after EQC passes the new fee/reporting rule, we will begin drafting a rule to implement the next phase of the HWAC recommendations. Since this will be a much more difficult and comprehensive change, we will be careful to ensure the detailed changes are reviewed and discussed through an advisory committee. We hope to have a draft rule for review by the end of the year so that advisory committee discussions can begin early in 1992.

#### SENATE BILL 241

During the HWAC meetings, we had several discussions about raising the land disposal fee at the Chemical Waste Management facility in Arlington by \$10 per ton. This proposal has taken shape in the Oregon Legislature as SB 241. Any further development of our CEG program and hazardous waste technical assistance program depends on the passage of this legislative change. I have enclosed a packet of information on the bill and a copy of DEQ's testimony on the bill for your use and information. Should you have any questions, please do not hesitate to contact me, Bob Danko, Rick Volpel or Scott Latham at 229-5913.

I apologize for this long-winded memo but wanted to update you on the status of many of the activities discussed during the HWAC meetings. As always, give me a call if you have any questions, concerns or suggestions.

HMS Environmental, Inc.  
Oregon Graduate Center Science Park  
600 N.W. Compton Drive, Suite 306  
Beaverton, Oregon 97006  
503) 690-1420  
FAX (503) 690-1421

March 15, 1991

Mr. Fred Hansen, Director  
Oregon Department of Environmental Quality  
811 SW Sixth Avenue  
Portland, Oregon 97204-1390

Re: Department Hazardous Waste Generator and Facility Fee

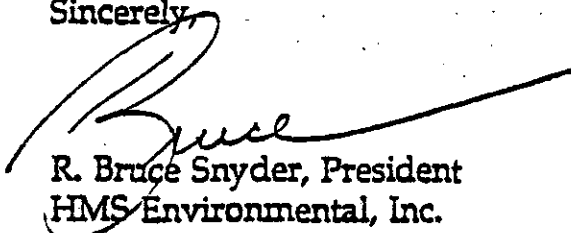
Dear Fred:

Attached are hazardous waste generator and facility fee recommendations from the Hazardous Waste Advisory Committee. As you are aware, the Advisory Committee was formed in May of last year to evaluate the existing hazardous waste fee structure and offer recommendations to the Department that would make the fee system more stable, equitable and predictable. Represented on the Committee were large and small hazardous waste generators, environmental, municipal and industrial organizations and hazardous waste consultants.

The Committee feels that the proposed fee structure presents a system that will assess fees on actual waste produced, reward preferred hazardous waste management practices, and provide a more stable and predictable funding method for the Department. Additionally, we believe this approach will serve to promote waste reduction in Oregon as well.

If you have any questions about the Committee's recommendations, feel free to contact me at (503) 690-1420.

Sincerely,



R. Bruce Snyder, President  
HMS Environmental, Inc.

Enclosure

cc: Roy W. Brower, DEQ  
Hazardous Waste Advisory Committee Members

## RECOMMENDATIONS OREGON DEQ HAZARDOUS WASTE 1990 ADVISORY COMMITTEE

The Oregon Department of Environmental Quality organized a Hazardous Waste Advisory Committee (HWAC) during 1990 to specifically consider funding options and fee strategies for the hazardous waste program in Oregon. In 1988, the Environmental Quality Commission (EQC) established a surcharge intended to cover projected deficits in the program. The current fee structure expires on June 30, 1991. DEQ was expected to develop a permanent fee structure to support the program and to consider ways the fee structure could reward waste reduction and recycling activities.

The HWAC consisted of representatives of small and large businesses, industry associations, consultants, waste management companies, recyclers, and environmental/public interest groups. Based on a series of seven HWAC meetings the following recommendations were made:

1. Hazardous waste generators should be billed in 1991 under the existing fee structure but the surcharge should be reduced or eliminated.
2. Hazardous waste treatment, storage and disposal facilities should be billed in 1991 under the existing fee structure including the surcharge.
3. A comprehensive hazardous waste generator registration program for conditionally exempt small quantity generators should be established by July 1991.
4. An annual hazardous waste generator registration fee should be established by January 1992 as follows:

Large Quantity Generators	\$350
Small Quantity Generators	\$200
Conditionally Exempt Generators	\$ 50

5. The existing fee structure should be revised so that it reinforces the preferred hazardous waste management hierarchy. The first billing should occur in 1992.
  - a. A base volume fee would be established for each gallon or pound of hazardous waste generated. This fee would be established on an annual basis and adjusted to raise the necessary revenue to support the current hazardous waste program.

- b. The base volume fee would be multiplied for each waste stream by a factor established for each waste management method as follows:

<u>Management Method</u>	<u>Fee Factor</u>
Burning for Fuel/Energy Recovery	.75
Treatment (on-site and off-site)	1.00
Treatment to render waste non-hazardous	.75
Incineration/Thermal Treatment	1.00
Land Disposal	1.50
Neutralization (off-site)	.75
On-site Storage	1.00
Other Management Methods	1.00
Recycle/Beneficial Use	.50
Waste Permitted to be discharged under CWA Section 402	0.00
Transfer Station	1.00
Unknown	2.00

6. Wastes to be exempted from this fee include household hazardous and conditionally exempt hazardous waste from collection programs and nonhazardous waste disposed of at a hazardous waste facility. Wastes from orphan site cleanups should also be exempt but once a responsible party is identified, they would become subject to all past and present fees.
7. Fees on treatment, storage and disposal facilities will not be changed except that the surcharge will become a permanent part of the fee structure. A fee (based on recovery of costs) should be established for RCRA corrective actions: this category should be revisited after 1992 or after the new generator fees have been implemented.

Facilities Selected For Inclusion In DEQ Hazardous Waste/Toxic Use Consolidated Reporting Form(s)

Data Element	# of		Currently collected?	
	Total	# of DEQ		
	Primary	Core		
	Uses	Uses	Uses	
<b>General Facility Information</b>				
<i>(To be completed by TSDRs, LQGs, and SQGs, including generators recycling their wastes and including recyclers. All or part also to be completed by Toxics Users. To be completed upon commencement of activities and updated annually.)</i>				
facility/site name	6	2	4	Yes - notification, BR, quarterly reports
reason for notification	1	1	1	Yes - notification
RCRA EPA ID number	6	2	4	Yes - notification, BR, quarterly reports
has facility name assoc. w/ ID changed?	1	1	1	Yes - quarterly reports
DEQ ID #	1	0	1	Yes - entered by DEQ
other permit #: EPA TRI ID no.	2	0	1	No
business owner name	1	1	0	Yes - 1-time notification; not updated
business owner address	1	1	0	Yes - 1-time notification; not updated
business owner phone	1	1	0	Yes - 1-time notification; not updated
change in owner flag	1	1	0	Yes - 1-time notification; not updated
forms information contact name	3	2	1	Yes - 1-time notification; not updated
forms information contact title	3	2	1	Yes - 1-time notification; not updated
forms information contact phone	2	2	1	Yes - 1-time notification; not updated
facility/site location contact name	2	0	1	Yes - 1-time notification; not updated
facility/site location contact title	2	0	1	Yes - 1-time notification; not updated
facility/site location contact phone	2	0	1	Yes - 1-time notification; not updated
facility/site location address (incl cnty)	6	2	3	Yes - 1-time notification; not updated
billing contact name	1	0	1	Yes - 1-time notification; not updated
billing contact title	1	0	1	Yes - 1-time notification; not updated
billing contact phone	1	0	1	Yes - 1-time notification; not updated
billing address	1	0	1	Yes - 1-time notification; not updated
facility/site mailing address	6	2	6	Yes - 1-time notification; not updated
certification name	2	2	1	Yes - 1-time notification; not updated
certifier's title	2	2	1	Yes - 1-time notification; not updated
certifier's signature	2	2	1	Yes - 1-time notification; not updated
certification signature (date)	2	2	1	Yes - 1-time notification; not updated
generator status	6	2	3	Yes - 1-time notification; not updated
generator status change	1	1	1	Yes - 1-time notification; not updated
regulatory status (TSDs only)	1	0	1	Yes - 1-time notification; not updated
regulatory status change	1	1	1	Yes - 1-time notification; not updated
reason for not generating	1	1	0	Yes - 1-time notification; not updated
type of waste activity	3	1	2	Yes - 1-time notification; not updated
on-site mgmt status - RCRA exempt act.	1	1	0	Yes - 1-time notification; not updated
on-site mgmt status - RCRA TSD act.	1	1	0	Yes - 1-time notification; not updated
on-site mgmt status - storage	1	1	0	Yes - 1-time notification; not updated
land type	1	1	0	Yes - 1-time notification; not updated
sic code	4	2	2	Yes - 1-time notification; not updated
size: # employees (range)	1	0	0	No
operator type	1	1	0	Yes - 1-time notification; not updated
owner type	2	1	0	Yes - 1-time notification; not updated
id opening/closing date	2	0	2	Yes - 1-time notification; not updated
number of pages submitted	1	1	0	N/A

**Elements Selected For Inclusion In DEQ Hazardous Waste/Toxic Use Consolidated Reporting Form(s)**

Data Element	Total	# of EPA	# of DEQ	Currently collected?
	Primary Uses	Core Uses	Core Uses	
<b>Generation Information</b>				
<i>(To be collected annually from LQGs and SQGs, including generators who are recycling their wastes.</i>				
waste generated?: y/n	1	1	1	Yes - 1-time notification; not updated
waste type generated	8	3	3	Yes - Quarterly reports - off-site waste only; Biennial Report - LQGs only
waste type generated (state-only)	4	3	1	Yes - Quarterly reports - off-site waste only; Biennial Report - LQGs only
waste description	3	1	1	Yes - Biennial Report - Large Quantity Generators only
waste form	4	2	0	Yes - Biennial Report - Large Quantity Generators only
source of waste (generating process)	5	2	0	Yes - Biennial Report - Large Quantity Generators only
origin	2	2	0	Yes - Biennial Report - Large Quantity Generators only
origin system	1	1	0	Yes - Biennial Report - Large Quantity Generators only
radioactive waste: y/n	1	1	0	No
sic code of generating process	2	2	0	Yes - Biennial Report - Large Quantity Generators only
TRI constituent (state req. to file?)	1	1	0	Yes - Biennial Report - Large Quantity Generators only
qty generated	7	2	4	No - Quarterly reports - off-site waste only; Biennial Report - LQGs only
unit of measure	6	2	3	No - Quarterly reports - off-site waste only; Biennial Report - LQGs only
density/dens. uom	6	2	0	No - Quarterly reports - off-site waste only; Biennial Report - LQGs only

**Toxics Use/Waste Reduction Information**

*(To be collected annually from toxics users, LQGs, and SQGs, including TSDs who are also generators.*

C.A.S. # of TRI constit. in waste	1	1	0	Yes - Biennial Report - Large Quantity Generators only
C.A.S. # of chemical used	1	0	1	No
name of chemical used	1	0	1	No
pounds/year of chemical used	1	0	1	No
qty of waste recycled due to waste min	1	1	0	Yes - Biennial Report - Large Quantity Generators only
source red. qty	1	1	0	Yes - Biennial Report - Large Quantity Generators only
performance goals: reduction in toxics use	1	0	1 (opt)	No
performance goals: reduction in waste gen	1	0	1 (opt)	No
effects of waste min activities	1	1	0	Yes - Biennial Report - Large Quantity Generators only
factors limiting recycling	1	1	0	Yes - Biennial Report - Large Quantity Generators only
factors limiting source reduction	1	1	0	Yes - Biennial Report - Large Quantity Generators only
factors limiting source red/recycl	1	0	1 (opt)	No
waste min - opportunity assessment?	1	1	0	Yes - Biennial Report - Large Quantity Generators only
reduction measures implemented	1	0	1 (opt)	No
waste min activities	1	1	0	Yes - Biennial Report - Large Quantity Generators only
waste min - begin activity?	1	1	0	Yes - Biennial Report - Large Quantity Generators only
reduction measures - description of data	1	0	1	No
activity/prod. index	2	1	1 (opt)	Yes - Biennial Report - Large Quantity Generators only

**Waste Management Information**

*(To be collected annually from LQGs, and SQGs, including TSDs who are also generators and including generators who are recycling their wastes.)*

qty managed on-site	4	2	1	No
on-site management system(s)	5	2	2	No
qty shipped	4	2	1	Yes - Quarterly reports, Biennial Report
managing fac RCRA EPA ID	4	2	1	Yes - Quarterly reports, Biennial Report
captive/commerical/on-site mgmt. demand	1	1	2	No
off-site management system(s)	5	2	2	No

Elements Selected For Inclusion In DEQ Hazardous Waste/Toxic Use Consolidated Reporting Form(s)

Data Element	# of		Currently collected?
	Total Primary Uses	# of EPA Core Uses	

Waste Management Information - Waste Received

(To be collected annually from TSDRs receiving waste from off-site.)

RCRA EPA ID number (generator)	3	2	0	Yes - Quarterly reports, Biennial Report
waste type received	3	2	0	Yes - Quarterly reports, Biennial Report
waste type received (state only)	3	2	0	Yes - Quarterly reports, Biennial Report
descr. of waste received	1	1	0	Yes - Biennial Report
form code of waste rec'd	3	2	0	Yes - Biennial Report
radioactive waste received: y/n	1	1	0	No
qty received	3	2	0	Yes - Quarterly reports, Biennial Report
qty of received waste managed	2	1	0	No
unit of measure	2	1	0	Yes - Quarterly reports, Biennial Report
density/dens. uom	1	1	0	Yes - Quarterly reports, Biennial Report
system type (managing waste rec'd)	3	2	0	Yes - Quarterly reports, Biennial Report
captive/commercial/on-site mgmt (import)	1	1	0	No

Capacity Information

(To be collected annually from TSDRs, including recycling facilities.)

system type	4	2	1	Yes - Biennial Report
system description	1	1	0	Yes - Biennial Report
system operating status	4	0	1	No
system operational status	2	2	0	Yes - Biennial Report
system regulatory status	3	2	0	Yes - Biennial Report
unit type	2	2	0	Yes - Biennial Report
captive/commercial/on-site system flag	3	2	0	No
commercial availability	2	2	0	Yes - Biennial Report
percent commercially available	1	1	0	Yes - Biennial Report
limitations on capacity	1	1	0	Yes - Biennial Report
capacity: total	1	1	0	Yes - Biennial Report
capacity: RCRA	4	2	1	Yes - Biennial Report
% utilized by "non-hazardous" waste	1	1	0	No
% utilized by "other hazardous" waste	1	1	0	No
capacity utilization	2	0	2	No
influent quantity: RCRA	1	1	0	Yes - Biennial Report
influent quantity: total	1	1	0	Yes - Biennial Report
effluent quantity: RCRA	1	1	0	Yes - Biennial Report
effluent quantity: total	1	1	0	Yes - Biennial Report
sludge quantity: RCRA	1	1	0	Yes - Biennial Report
sludge quantity: total	1	1	0	Yes - Biennial Report
new capacity	1	1	0	Yes - Biennial Report
future availability code	1	1	0	Yes - Biennial Report
planned change in capacity flag	1	1	0	Yes - Biennial Report
planned change in system capacity	2	1	0	No
planned year of change	1	1	0	Yes - Biennial Report
percent of future capacity comm. avail.	1	1	0	Yes - Biennial Report



## Number/Type of Data Elements

Type of Information	Core Reporting Community			
	140 Toxics Users <i>25 data elements</i>	475 SQGs <i>63-81 data elements</i>	100 LQGs <i>81 data elements</i>	21 TSDs <i>70-120 data elements</i>
General Facility Information 43 elements	subset only	yes	yes	yes
TURHWR Information 18 elements	yes	if Toxic User	yes	if Toxic User or LQG
Generation and Management Information 20 elements	no	yes	yes	if generator
Waste Received Information 12 elements	no	no	no	if receive waste from off-site
Capacity Information 27 elements	no	no	no	yes

## Definition of Data Elements

### Data Element

### Definition

activity/prod. index	Measure of changes in economic and other factors that affect the qty of waste generated in one year, compared to another.
amt. of time stored	Length of time that waste was stored on-site
billing address	Mailing address to which bills should be sent
billing contact	Name of person to whom bills should be sent
business owner type	Designation of owner of establishment as federal, state, private, etc.
capacity utilization	Amount of management capacity utilized (e.g. tons of waste landfilled)
capacity: RCRA	Amount of RCRA hazardous waste that system has capacity to manage.
capacity: total	Total amount of waste that system has capacity to manage.
captive/commercial/on-site system flag	Designation of system managing waste as captive (receiving wastes from generators owned same company), commercial (receiving waste from any generator for a fee), or on-site (managing waste generated at the facility)
CAS numbers	Chemical Abstract Service number for hazardous wastes generated or chemicals used
certification name - BR	Printed name of person certifying that an effort has been made to minimize waste
certification name - notification	Printed name of person certifying that all information on form is true and correct
certification signature (date)	Date of signature
certifier's signature	Signature of person named on form
certifier's title	Position in organization occupied by person signing form
change in toxics use fr prev yr	Absolute difference in quantity of a toxic chemical used in previous year from current year
commercial availability	Designation of management capacity as available for commercial use.
contact name	Printed name of person with the establishment to be contacted for further information
contact phone	Phone number of person to be contacted for further information
contact title	Position in organization occupied by person named as contact
density/dens. uom	Mass per unit volume/units of density (e.g., kg/l)
DEQ ID #	Oregon DEQ facility identification number
descr. of waste received	Written description of the waste received by the facility
effects of waste min activities	Changes (+ or -) in toxicity or quantity of a wastestream due to waste minimization activities
effluent quantity: RCRA	Quantity of RCRA hazardous liquid residuals leaving treatment system
effluent quantity: total	Quantity of total liquid residuals leaving treatment system
factors limiting recycling	Reasons for not initiating recycling activity (e.g., technical, economic infeasible, insufficient capital, etc.)
factors limiting source reduction	Reasons for not initiating source reduction activity (e.g., technical, economically infeasible, etc.)

factors limiting source red/recycl	Reasons for not initiating source reduction/recycling activity (e.g., technical, economically infeasible, etc.)
form code of waste rec'd	Description of form of waste (e.g., spent acids with metals, or untreated plating sludge with cyanides)
future availability code	Designation of future captive, limited commercial, or commercial capacity
generator status	Specification of generator as TSD, fully regulated, small, or conditionally exempt
has name assoc. w/ ID changed?	Designation if name of facility has changed
id opening/closing date	Notified date that activities began/ceased at facility
id status change	Purpose for notifying (e.g. new, withdrawal, reactivate, update, etc.)
industry type	Designation of the industry of the CEG (e.g., SIC code, industry name)
influent quantity: RCRA	Quantity of RCRA hazardous waste entering the system
influent quantity: total	Total quantity of waste entering the system
inspections contact name	Name of person from the establishment to be contacted for inspection
inspections contact phone	Phone number of person named
legal owner address	Address of legal owner of establishment
legal owner name	Name of legal owner of establishment
length of time waste stored	Length of time that waste was stored on-site
limitations on capacity	Reasons that maximum operational capacity may be limited (e.g., operating permit, maintenance downtime, etc.)
location address	Physical location of establishment
location address (incl cnty)	Physical location of establishment with county designated
location contact	Name of person to to contact at establishment
location property type	Designation of property as federal, state, private, etc.
location (latitude/longitude)	Latitude and longitude coordinates of establishment
mailing address	Address to send mail to facility
managing fac RCRA EPA ID	Hazardous waste identification number assigned by the EPA to facility managing waste
manifest start/stop date	Date of first and last manifest sent to DEQ
name of chemical used	Name of toxic chemical used
new capacity	Quantity of waste that system will be capable of managing after planned changes
no needs vs forms	Uses for which forms are not necessary
number of pages submitted	Number of pages for Biennial Report
off-site management system(s)	The type of system used to manage waste received from off-site (e.g., energy recovery, sludge dewatering, landfill, etc.)
onetime/recurrent flag	Designation of wastestream as a single generation not repeated
on-site management system(s)	The type of system used to manage waste received from on-site (e.g., energy recovery, sludge dewatering, landfill, etc.)
on-site mgmt status - RCRA exempt act.	Designation that facility conducts treatment, recycling, or disposal exempt from RCRA permitting
on-site mgmt status - RCRA TSD act.	Designation that facility conducts treatment, recycling, or disposal requiring a RCRA permit
on-site mgmt status - storage	Designation that facility has permitted RCRA storage (i.e., not RCRA exempt short-term storage)

operator type	Designation of operator of establishment as federal, state, private, etc.
origin system	Type of process generating waste
other permit #: air	Six digit Air Quality permit number for establishment
other permit #: NPDES	NPDES permit number for establishment (file number given by state)
other permit #: pretreatment	Permit number for pretreatment and discharge to POTW (issued by POTW)
owner type	Designation of owner of establishment as federal, state, private, etc.
percent commercially available	Percentage of capacity available to any facility for commercial use
percent of future capacity comm. avail.	Percentage of future capacity available to any facility for commercial use
permit modification class	Designation of type of treatment/disposal permit modification
permit modification date submitted	Date permit modification submitted.
permit modification type	Description of permit modification.
planned change in capacity flag	Designation of plan to change facility's capacity
planned change in system capacity	Designation of plan to change system's capacity
planned year of change	Year that planned changes will become operational
pounds/year of chemical used	Weight of toxic chemical used
primary gen/trans/residual A	Designation of whether waste was initially generated at establishment, transferred to facility, or
primary gen/trans/residual B	generated by waste treatment at facility
production ratio	Relative measure of current year activity or product to previous year
prod./activity index	Relative measure of current year activity or product to previous year
projected qty of toxic recycled (2 yrs)	Quantity of toxic chemical projected to be recycled during following two years
projected reduction in toxics use	Absolute difference in quantity of toxic chemical used in current year from subsequent years
projected reduction in waste gen	Absolute difference in quantity of waste generated in current year from subsequent years
projected toxic discharge (2 yrs)	Quantity of toxics projected to be discharged in two years
projected toxics discharge	Quantity of toxics projected to be discharged in subsequent year
qty discharged to NPDES	Weight or volume of waste discharged to surface waters under an NPDES permit
qty discharged to POTW	Weight or volume of waste discharged to POTW via a sanitary sewer
qty generated	Weight or volume of hazardous waste generated
qty generated (lb/year)	Weight of hazardous waste generated
qty generated - acute haz.	Weight or volume of acute hazardous waste ("P" listed wastes) generated
qty generated - exempt state waste	Weight or volume of state hazardous wastes generated
qty generated - prev. yr	Weight or volume of hazardous waste generated in year prior to BR
qty input chemicals	Weight or volume of toxic chemical used at establishment
qty managed on-site	Weight or volume of waste generated and managed at establishment
qty of one-time toxic release	Quantity of toxic released because of a nonrecurrent event

qty of received waste managed	Weight or volume of waste shipped to facility and managed there
qty of toxic prior to tdr	Quantity of toxic chemical before treatment, disposal, or recycling
qty of toxic recycled	Quantity of toxic reused or reclaimed
qty received	Weight or volume of waste shipped to facility
qty recycled due to waste min	Quantity of waste reused or reclaimed because of a specific waste minimization activity
qty recycled on site	Weight or volume of waste recycled at establishment generating waste
qty shipped	Weight or volume of waste moved (shipped from or received by) establishment
qty stored	Weight or volume of waste stored at establishment
qty waste oil	Weight or volume of waste oil generated at establishment
radioactive flag: y/n	Designation of whether waste is a mixed waste (i.e., radioactive)
radioactive waste	Designation of waste as mixed (i.e., radioactive)
RCRA EPA ID number	Hazardous waste identification number assigned by EPA to notifiers
RCRA EPA ID number (generator)	Hazardous waste identification number assigned by EPA to generator of waste
reason for not generating	
reduction measures implemented	Designation of whether reduction activities have been implemented
reduction measures - description	A written description of the reduction activities
regulatory status	Designation of facility as full regulated, small quantity, or conditionally exempt
regulatory status change	Designation of regulatory status change
remaining capacity	Volume of waste that facility can manage on-site
sic code	Standard Industrial Classification code of the establishment
sic code of generating process	Standard Industrial Code of source process used at the establishment
site name	Name of establishment completing form
size: # employees	Number of persons employed at establishment
sludge quantity: RCRA	Weight or volume of sludge resulting from treatment of RCRA hazardous waste
sludge quantity: total	Weight or volume of sludge resulting from treatment of all waste
source of waste (generating process)	Type of process generating waste
source red. qty	The quantity of waste reduced (i.e., not generated) from previous year to current year due to a source reduction
system description	Written description of processes, units, and wastes managed by system
system operating status	Designation of system as operation, idle, permanently closed, under construction, etc.
system operational status	Designation of system as operation, idle, permanently closed, under construction, etc.
system regulatory status	Designation of regulatory status of units in system (e.g., RCRA, NPDES, UIC, POTW, state-only, etc.)
system type	System used for managing waste (e.g., solvents recovery, biological treatment, neutralization, etc.)
system type (managing waste rec'd)	The type of system used to manage the waste (e.g., metals recovery, fuel blending, deepwell injection, etc.)
techniques to id reduction opportunities	A description of the ways source reduction opportunities were identified

transporter EPA ID number	Hazardous waste identification number assigned by EPA to transporter of waste
TRI constituent	Designation of whether waste is regulated by TRI
TRI EPA ID number	Fifteen digit Toxic Release Inventory number assigned by EPA to establishments filing TRI
type of source reduction	The type of activity used to reduce waste generated
type of waste activity	Designation of hazardous waste activity (e.g., generate, transport, recycle, treat, etc.)
unit of measure	Units used for measuring quantity
unit types	Unit used in system for managing waste (e.g., tank, incinerator, waste pile, etc.)
waste constituents	Chemical constituents of waste
waste description	Written description of waste
waste form	Description of form of waste (e.g., spent acids with metals, or untreated plating sludge with cyanides)
waste generated?: y/n	Designation of whether waste was generated at establishment
waste management: how managed	The type of system used to manage the waste (e.g., incineration, aqueous treatment, discharge to POTW, etc.)
waste management: where managed	Identification of facility managing waste by name or location
waste min activities	The type of activity used to reduce waste generated
waste min - begin activity?	Designation of whether reduction activities have been implemented
waste min - opportunity assessment?	Designation of whether opportunities to minimize waste have been identified
waste received? y/n	Designation of whether establishment has received waste
waste type generated	Code number designated to RCRA hazardous waste
waste type generated (state-only)	Code number designated to Oregon hazardous waste
waste type managed	Identification of the type of waste managed (e.g., RCRA or state hazardous waste code, written description, etc.)
waste type received	RCRA hazardous waste number assigned to waste
waste type received (state only)	State hazardous waste number assigned to waste
% utilized by "non-hazardous" waste	Percent of management system/capacity utilized by "non-hazardous" waste
% utilized by "other hazardous" waste	Percent of management system/capacity utilized by "other hazardous" waste

04-Apr-91 CPK\OREGON\DICTION.WK1

## EXECUTIVE SUMMARY

The project is divided into two primary phases: a data needs assessment phase and a form preparation phase. The needs assessment phase involved identifying the data elements to be collected by the report forms and identifying major policy issues related to the project. These issues fall into two categories; selection of data elements and major policy issues. The following text provides a brief summary of the decisions made by DEQ regarding the selection of data elements and major policy issues.

- ▶ **Selection of Data Elements** DEQ identified 120 pieces of information (data elements) to be collected on the reporting forms. Few reporters would need to provide all 120 data elements, however. Toxics Users would provide 25, Generators would provide between 63 and 81, and TSDs would provide between 70 and 120.

Of the 120 data elements, all but 25 are currently collected from at least a portion of the reporting community using EPA's Biennial Report forms and/or an amended version of EPA's Notification Form. The remaining 25 elements are elements identified by DEQ as needed to support the Toxics Use/Hazardous Waste Reduction program as well as to collect and assess fees.

- ▶ **Universe of Reporters** A primary issue identified by DEQ is the definition of which facilities will be covered by the consolidated reporting forms. DEQ determined that the following facilities will complete at least a portion of the forms: TSDs, LQs, SQs, Large Toxics Users, Generators recycling on-site (if not a closed-loop recycling process), and all off-site recycling facilities.

DEQ determined that the following facilities would NOT be required to complete the forms: generators recycling on-site in a closed-loop system, generators discharging all of their waste to POTWs or under NPDES permits.

- ▶ **Level of Aggregation** A second issue is whether information on generation, management, and shipments of waste would be collected in an annually aggregated bases (total tons of XX waste sent to Y facility in 1990) or by individual shipment and manifest number.

DEQ determined that it will combine the two approaches. The reporter will summarize total quantities of waste generated or received, providing aggregated background information regarding the waste, and also list individual shipments of the waste. There remains, however, an outstanding concern regarding whether recording shipment by shipment information on the forms would be too burdensome for the reporting community. If, based on a pre-test of the reporting forms, this appears to be the case, this issue will be revisited.

- ▶ **Frequency of Reporting** Another primary issue regarding the consolidated reporting forms is how often data collection would occur. DEQ has determined that an annual reporting cycle will provide sufficiently frequent information for all of their primary uses.
- ▶ **Compatibility with EPA Reporting Requirements** In meeting EPA reporting requirements, DEQ is faced with the need to address both data element requirements (i.e., is DEQ collecting the specific data elements required by EPA?) and data system requirements (i.e., is DEQ's automated data system compatible with EPA's BRS, RCRIS, and other data systems?).

DEQ has determined that it is a priority to be fully compatible with the data element requirements of the EPA Notification and Biennial Report (BR) Forms. Therefore, all questions appearing on these forms will appear on the DEQ forms as well. However, DEQ has determined that fully meeting EPA system compatibility may not be possible, given that its data system differs from EPA's.

- ▶ **Authority to Collect Data Elements** DEQ conducted an analysis of statutory and regulatory authority to collect the data elements identified under the needs assessment process. This analysis was then presented to DEQ legal council, who determined that sufficient statutory authority exists to authorize collection of all data elements selected for inclusion in the forms. However, specific regulatory authority does not exist for all data elements. DEQ is in the process of obtaining this authority through rulemaking.



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### **III. Needs Assessment Findings**

- Seven "areas of need" are to be met by these forms:**
  - Fee Assessment**
  - Toxics Use/Hazardous Waste Reduction Information**
  - Compliance/Permit/Closure activity support**
  - Program Management and Policy Development support**
  - EPA Biennial Reporting Requirements**
  - EPA Notification Requirements**
  - Capacity Assurance Plans**

Attachment G  
Agenda Item: D  
4/26/91 EQC Meeting

- **Five categories of data elements were identified to meet these needs**
  - General Facility Information (e.g., address, location, contact names, regulatory status)**
  - Hazardous Waste Generation and Management Information (e.g., type and amount of waste managed, where managed)**
  - Toxics Use/Hazardous Waste Reduction Information (e.g., efforts to reduce toxics use/hazardous waste generation)**
  - TSD Waste Received Information (e.g., types of waste received, where received from, and how managed)**
  - Hazardous Waste Management Capacity Information (e.g., type of capacity, amount of capacity)**

---

## **IV. 6 Key Decisions from DEQ Called For by Needs Assessment Process**

- 1. Number and Type of Data Elements**
- 2. Universe of Reporters**
- 3. Level of Aggregation**
- 4. Frequency/Timing of Reporting; Timing of Notification**
- 5. Compatibility of Data/Data System With Other Data/Systems**
- 6. Regulatory Authority to Collect Data**

### **Decision 1: Number/Type of Data Elements**

- **120 data elements identified: 43, general facility; 18, TURHWR; 20, generation/management; 12, waste received; 27, capacity.**
- **Few reporters would need to provide all 120 data elements (see attached matrix).**
- **'Exceptions reporting' can be used to limit overall burden.**
- **Most data elements identified are "core" or necessary for meeting one or more of DEQ's six areas of need (e.g., name of facility, EPA ID number of facility, type of waste generated).**
- **Some flexibility exists on the margin.**
  - other ID numbers
  - number of employees (range)
  - facility location (in UTM, tax lot, or latitude/longitude)

REQUEST FOR EQC ACTION

Meeting Date: April 26, 1991  
Agenda Item: E  
Division: Water Quality  
Section: Industrial Waste

**SUBJECT:**

Water Quality Industrial Waste Permit Fees

**PURPOSE:**

Request to the Environmental Quality Commission (Commission) for Hearing Authorization for an Increase in Industrial Waste Water Quality Permit Fees.

**ACTION REQUESTED:**

- Work Session Discussion
  - General Program Background
  - Potential Strategy, Policy, or Rules
  - Agenda Item  for Current Meeting
  - Other: (specify)

- Authorize Rulemaking Hearing
- Adopt Rules

- Proposed Rules
- Rulemaking Statements
- Fiscal and Economic Impact Statement
- Public Notice

- Attachment A
- Attachment B
- Attachment C
- Attachment D

- Issue a Contested Case Order
- Approve a Stipulated Order
- Enter an Order
  - Proposed Order

- Attachment



811 SW Sixth Avenue  
Portland, OR 97204-1390  
(503) 229-5696



Meeting Date: April 26, 1991  
Agenda Item: E  
Page 2

- Approve Department Recommendation
- Variance Request Attachment
- Exception to Rule Attachment
- Informational Report Attachment
- Other: (specify) Attachment

**DESCRIPTION OF REQUESTED ACTION:**

Because of increased costs, stagnant federal funding, and limited General Funds available, it is necessary to increase user fees to fund the existing industrial wastewater permitting program and the program enhancements authorized in the Governor's recommended budget for FY 91-93. The revenue forecast under the current fee schedule is about \$384,400 for the biennium. The Governor's recommended budget includes projected fee revenue needs of \$1,327,550 for the biennium. Fees are used for the review and processing of wastewater disposal permit applications and for determining compliance with permit limitations and state water quality standards. The Department of Environmental Quality (Department) is requesting authorization to go to public hearing on a proposed increase in the industrial wastewater permit fees.

The last time the fees were changed was in May 1990. At that time there was a small increase to partially fund one groundwater position. Prior to 1990, there were minor changes about every two years to address increased costs due to inflation. This is the first major overhaul of the industrial waste permit fee schedule since it was first adopted in 1976.

**AUTHORITY/NEED FOR ACTION:**

- Required by Statute: ORS 468.065 Attachment E  
Enactment Date: \_\_\_\_\_
- Statutory Authority: \_\_\_\_\_ Attachment \_\_\_\_\_
- Pursuant to Rule: OAR 340-45-075 Attachment F
- Pursuant to Federal Law/Rule: \_\_\_\_\_ Attachment \_\_\_\_\_
- Other: Attachment \_\_\_\_\_
- Time Constraints: It is important for the new fee schedule to be in affect by July 1, 1991, so that invoicing for the annual compliance determination fees can reflect the new fee schedule.

**DEVELOPMENTAL BACKGROUND:**

<input checked="" type="checkbox"/> Advisory Committee Report/Recommendation	Attachment <u>G</u>
<input type="checkbox"/> Hearing Officer's Report/Recommendation	Attachment <u>    </u>
<input type="checkbox"/> Response to Testimony/Comments	Attachment <u>    </u>
<input type="checkbox"/> Prior EQC Agenda Items: (list)	Attachment <u>    </u>
<input type="checkbox"/> Other Related Reports/Rules/Statutes:	Attachment <u>    </u>
<input checked="" type="checkbox"/> Supplemental Background Information (Rationale For Change in Industrial Waste Permit Fee Schedule)	Attachment <u>H</u>

**REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:**

The increase in fees directly affects all industrial facilities with wastewater disposal permits and any proposed new facility which requires a wastewater disposal permit in order to operate in Oregon. Regulating industrial wastewater discharges by issuing permits is the primary method used by the Department to preserve water quality in waters of the State.

The Department is using an advisory committee to review the proposed permit fee schedule. That committee, which consists of members of the regulated community as well as other interested parties, supports the proposed fee schedule. See Attachment G. For a summary of the proposed fees compared to the existing fees, see the draft public notice which is Attachment D.

**PROGRAM CONSIDERATIONS:**

The 1991-93 Governor's recommended budget for the industrial waste permit fee program projects fee revenue needs of about \$1,327,550 for the biennium. This proposed budget would sustain the existing program and add 3 new positions to help eliminate the current permit backlog and prevent future backlog. The projected revenue with the existing fee schedule is about \$384,400 for the biennium. The revenue projections under the existing and proposed fee schedules are found in Attachment H. The program has attempted to determine the most fair and equitable way to spread the required increase in required revenue over the categories of industrial permits and permit processing activities. An attempt has been made to better estimate the staff effort in processing new applications. The proposed fees for processing new applications are based upon that estimate.

Meeting Date: April 26, 1991  
Agenda Item: E  
Page 4

The revenue projections used in the rationale document associated with this report (Attachment H) did not consider the potentially large number of storm water permit applications which will be required under new EPA storm water permitting requirements. Since the Department does not currently have the staff necessary to implement this program, it will be our intent to go to the Emergency Board for authorization to hire limited duration fee supported positions once the applications start coming in, fee revenues are available, and the total resource impact of the program is better known. The first applications are expected about November 1991. This will not require additional fee increases.

**ALTERNATIVES CONSIDERED BY THE DEPARTMENT:**

The program made an estimate of the staff resources it would take to process complex and non-complex applications and established a fee schedule proportional to the estimated resources needed. The fees would cover a portion of the cost of the permitting, compliance, and enforcement program.

If the fee increase is not approved, it will be necessary to reduce the water quality permit program unless revenue comes from other sources.

**DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:**

Attachment H shows the rationale used in establishing the new fee schedule. In addition to the issues addressed in Attachment H, the Department recommends the following changes in the fee schedule:

- a. A small permit processing fee varying between \$50 and \$150 will be charged for the issuance of General Permits. The fee will be dependent upon the various documents and plans required to be reviewed in order to issue the permit. That schedule is shown in the middle of page A - 2 of Attachment A.
- b. The Annual Compliance Determination Fee Schedule for mining operations has been expanded to cover more categories of mining and processing activities. That schedule is found on page A - 5 of Attachment A.



Meeting Date: April 26, 1991  
Agenda Item: E  
Page 5

**CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:**

These changes in the fee schedule are consistent with agency and legislative policy. It is the policy of the state to protect and preserve water quality by regulating wastewater discharges. It is also the policy of the state that a reasonable portion of the costs associated with the wastewater permit program be born by the regulated community in the form of user fees.

**ISSUES FOR COMMISSION TO RESOLVE:**

1. About 70% of the total revenue to be generated by the new fee schedule will come from the Annual Compliance Determination Fees. The remaining 30% is to come from permit processing fees. Does that split seem reasonable to the Commission? It does represent the current effort in the industrial waste source control program. The revenue from the annual compliance determination fees is quite predictable as is the revenue from renewal applications. However, the revenue from new applications or requests for permit modifications is not predictable. In addition, from 70 to 80% of staff effort is related to compliance assurance.
2. The fees for new permit applications are based upon 50% of an estimated cost of staff resources involved in processing the permit application. The remainder is to come from federal and general funds. Does that seem reasonable to the Commission? In the Governor's recommended budget for the Water Quality Industrial Waste Source program, the amount of fee revenues compared with federal and general funds is about 50%.

Meeting Date: April 26, 1991  
Agenda Item: E  
Page 6

INTENDED FOLLOWUP ACTIONS:

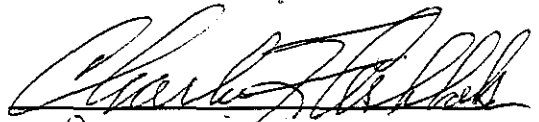


If hearing authorization is granted, a public hearing on the proposed fee schedule will be held as indicated on the attached public notice document, Attachment D.

Approved:

Section:

Division:

Director:

Report Prepared By: Charles K. Ashbaker

Phone: 229-5325

Date Prepared: March 1, 1991

CKA:crw  
IW\WC8\WC8108  
April 5, 1991

## PERMIT FEE SCHEDULE

## WASTEWATER DISPOSAL PERMITS

## NOTE:

The underlined portions of text represent proposed additions made to the rules.

The [bracketed] portions of text represent proposed deletions made to the rules.

340-45-075

(1) **Filing Fee.** Unless waived by this rule, a filing fee of \$50 shall accompany any application for issuance, renewal, modification, or transfer of an NPDES permit or WPCF permit, including registration for a General Permit pursuant to OAR 340-45-033 and request for a Special Permit pursuant to OAR 340-14-050. This fee is non-refundable and is in addition to any application processing fee or annual compliance determination fee which might be imposed.

(2) **Application Processing Fee.** An application processing fee [~~varying between \$75 and \$2000~~] shall be submitted with each application[~~], except that an application processing fee is not required to register for coverage under a General Permit.~~] The amount of the fee shall depend on the type of facility and the required action as follows:

## (a) New Applications:

(A) Major industries <sup>1</sup> . . . . .	[ <del>\$2000</del> ]	<u>\$20,000</u>
(B) Minor industries . . . . .	[ <del>\$-600</del> ]	<u>\$ 4,000</u>
(C) Major domestic <sup>2</sup> . . . . .		\$ 1,500
(D) Minor domestic . . . . .		\$ 600
(E) Agricultural . . . . .	[ <del>\$-300</del> ]	<u>\$ 4,000</u>

## (b) Permit Renewals (including request for effluent limit modification):

(A) Major industries <sup>1</sup> . . . . .	[ <del>\$1000</del> ]	<u>\$10,000</u>
(B) Minor industries . . . . .	[ <del>\$-300</del> ]	<u>\$ 2,000</u>
(C) Major domestic <sup>2</sup> . . . . .		\$ 750
(D) Minor domestic . . . . .		\$ 300
(E) Agricultural . . . . .	[ <del>\$-150</del> ]	<u>\$ 2,000</u>

## (c) Permit Renewals (without request for effluent limit modification):

(A) Major industries <sup>1</sup>	[\$-500]	\$ 5,000
(B) Minor industries	[\$-200]	\$ 1,000
(C) Major domestic <sup>2</sup>		\$ 500
(D) Minor domestic		\$ 200
(E) Agricultural	[\$-100]	\$ 1,000

(d) Permit Modifications (involving increase in effluent limitations):

(A) Major industries <sup>1</sup>	[\$1000]	\$10,000
(B) Minor industries	[\$-300]	\$ 2,000
(C) Major domestic <sup>2</sup>		\$ 750
(D) Minor domestic		\$ 300
(E) Agricultural	[\$-150]	\$ 2,000

(e) Permit Modifications (not involving an increase in effluent limits): All categories

	[\$--75]	\$ 500
--	----------	--------

(f) Special Permits issued pursuant to OAR

340-14-050	[\$--75]	\$ 250
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(g) New General Permits, by permit number:

(A) <u>100, 400, 500, 600 (over 1500 cubic yards per year), 900, 1000</u>		\$ 50
(B) <u>200, 300, 1300, 1400, 1500</u>		\$ 100
(C) <u>1200</u>		\$ 150

(3) Annual Compliance Determination Fee Schedule:

(a) Domestic Waste Sources -- Initial and Annual Fee is based on Dry Weather Design Flow, Type of Facility and Applicable Special Fees as follows:

	<u>Fees</u>
(A <sub>1</sub> ) Sewage Disposal - 50 MGD or more	\$20,860
(A <sub>2</sub> ) Sewage Disposal - At least 25 MGD but less than 50 MGD	\$14,110
(A <sub>3</sub> ) Sewage Disposal - At least 10 MGD but less than 50 MGD	\$ 6,610
(B <sub>a</sub> ) Sewage Disposal - At least 5 MGD but less than 10 MGD	\$ 5,010
(B <sub>b</sub> ) Sewage Disposal - At least 5 MGD but less than 10 MGD - Systems where treatment occurs in lagoons that discharge to surface waters	\$ 5,010
(C <sub>1a</sub> ) Sewage Disposal - At least 2 MGD but less than 5 MGD	\$ 3,285

	<u>Fees</u>
(A <sub>1</sub> ) Sewage Disposal - 50 MGD or more . . . . .	\$20,860
(C1 <sub>b</sub> ) Sewage Disposal - At least 2 MGD but less than 5 MGD - Systems where treatment occurs in lagoons that discharge to surface waters . . . . .	\$ 935
(C2 <sub>a</sub> ) Sewage Disposal - At least 1 MGD but less than 2 MGD . . . . .	\$ 2,210
(C2 <sub>b</sub> ) Sewage Disposal - At least 1 MGD but less than 2 MGD - Systems where treatment occurs in lagoons that discharge to surface waters . . . . .	\$ 845
(D <sub>a</sub> ) Sewage Disposal - Less than 1 MGD, and not otherwise categorized under Categories E, F, or G .	\$ 755
(D <sub>b</sub> ) Sewage Disposal - Less than 1 MGD - Systems where treatment occurs in lagoons that discharge to surface waters which are not otherwise categorized under Categories E, F, or G . . . . .	\$ 450
(E) Sewage Disposal - Systems where treatment is limited to lagoons which do not discharge to surface waters . . . . .	\$ 250
(F) Sewage Disposal - Systems larger than 20,000 gallons per day which dispose of treated effluent via subsurface means only . . . . .	\$ 260
(G) Sewage Disposal - Systems less than 20,000 gallons per day which dispose of treated effluent via sub- surface means only and other systems required by OAR 340, Division 71 to have a Water Pollution Control Facilities (WPCF) permit . . . . .	\$ 185
(H <sub>1</sub> ) Sources determined by the Department to administer a pretreatment program pursuant to federal pre- treatment program regulations (40 CFR, Part 403; January 28, 1981) shall pay an additional \$1,000 per year plus \$335 for each significant industrial user specified in their annual report for the previous year.	
(H <sub>2</sub> ) In addition to applicable fees specified above, special Annual Compliance Fees for Tualatin Basin Pollution Abatement Activities will be applied to the following permittees until Fiscal Year 1998:	
Unified Sewerage Agency - Durham . . . . .	\$26,720
Unified Sewerage Agency - Rock Creek . . . . .	\$22,995
Unified Sewerage Agency - Forest Grove . . . . .	\$ 5,450
Unified Sewerage Agency - Hillsboro . . . . .	\$ 4,240
Unified Sewerage Agency - Banks . . . . .	\$ 185
City of Portland - Tryon Creek . . . . .	\$ 910

(b) Industrial, Commercial and Agricultural Sources (Source and Initial and Annual Fee):

(For multiple sources on one application select only the one with highest fee)

- (A) Major pulp, paper, paperboard, hardboard, and other fiber pulping industry . . . . . {\$-2,000} \$ 6,000
- (B) Major sugar beet processing, potato and other vegetable processing, and fruit processing industry . . . . . {\$-2,000} \$ 6,000
- (C) Seafood Processing Industry:
  - (i) Bottom fish, crab, and/or oyster processing . . . . . {\$---225} \$ 675
  - (ii) Shrimp processing . . . . . {\$---225} \$ 675
  - (iii) Salmon and/or tuna processing . {\$---400} \$ 1,200
- (D) Electroplating industry (excludes facilities which do anodizing only):
  - (i) Rectifier output capacity of 15,000 Amps or more . . . . . {\$-2,000} \$ 6,000
  - (ii) Rectifier output capacity of less than 15,000 Amps but more than 5000 Amps . . . . . {\$-1,000} \$ 3,000
- (E) Primary Aluminum Smelting . . . . . {\$-2,000} \$ 6,000
- (F) Primary smelting and/or refining of non-ferrous metals utilizing sand chlorination separation facilities . . . . . {\$-2,000} \$ 6,000
- (G) Primary smelting and/or refining of ferrous and non-ferrous metals not elsewhere classified above . . . . . {\$-1,000} \$ 3,000
- (H) Alkalies, chlorine, pesticide, or fertilizer manufacturing with discharge of process waste waters . . . . . {\$-2,000} \$ 6,000
- (I) Petroleum refineries with a capacity in excess of 15,000 barrels per day discharging process waste water . . . . . {\$-2,000} \$ 6,000
- (J) Cooling water discharges in excess of 20,000 BTU/sec . . . . . {\$-1,000} \$ 3,000

(K)	Milk products processing industry which processes in excess of 250,000 pounds of milk per day . . . . .	[\$-2,000]	\$ <u>6,000</u>
(L)	Major mining operations (over 500,000 cubic yards per year) . . . . .	[\$-2,000]	\$ <u>6,000</u>
<del>[(M) -- Small mining operations which:</del>			
	<del>--(i) Discharge directly to public waters</del> . . . . .		<del>\$ --225</del>
	<del>-(ii) Do not discharge to public waters</del> . . . . .		<del>\$ --150</del>
	<del>(iii) Use cyanide or other toxic chemicals for extracting precious metals</del> . . . . .		<del>-\$-1,000]</del>
<u>(M) Minor mining and/or processing operations:</u>			
	<u>(i) Medium (100,000 to 500,000 cubic yards per year) mechanical processing</u> . . . . .		<u>\$ 2,000</u>
	<u>(ii) Medium using chemical processing (non-toxic)</u> . . . . .		<u>\$ 3,000</u>
	<u>(iii) Medium using chemical processing (toxic)</u> . . . . .		<u>\$ 6,000</u>
	<u>(iv) Small (less than 100,000 cubic yards per year) mechanical processing</u> . . . . .		<u>\$ 675</u>
	<u>(v) Small (using chemical processing (non-toxic)</u> . . . . .		<u>\$ 1,000</u>
	<u>(vi) Small (using chemical processing (toxic)</u> . . . . .		<u>\$ 3,000</u>
(N)	All facilities not elsewhere classified with disposal of process waste water . . .	[\$--400]	\$ <u>1,200</u>
(O)	All facilities not elsewhere classified which dispose of non-process waste waters (i.e., small cooling water discharges, boiler blowdown, filter backwash, log ponds, etc.) . .	[\$--250]	\$ <u>750</u>
(P)	Dairies and other confined feeding operations on individual permits . . . . .	[\$--150]	\$ <u>450</u>
(Q)	All facilities which dispose of waste waters only by evaporation from watertight ponds or basins . . . . .	[\$--150]	\$ <u>450</u>

(R)	General permits 100-J, 200-J, 400-J, 500-J, 1000 . . . . .	[\$----50]	\$ <u>100</u>
(S)	General permit 300-J . . . . .	[\$----30]	\$ <u>100</u>
(T)	General permits 900-J, 1200-J, 1300-J, 1400, 1500-J. . . . .	[\$----80]	\$ <u>100</u>

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<sup>1</sup> *Major Industries Qualifying Factors:*

- 1- Discharges large BOD loads; or
- 2- Is a large metals facility; or
- 3- Has significant toxic discharges; or
- 4- Has a treatment system which, if not operated properly, will have a significant adverse impact on the receiving stream; or
- 5- Any other industry which the Department determines needs special regulatory control.

<sup>2</sup> *Major Domestic Qualifying Factors:*

- 1- Serving more than 10,000 people; or
- 2- Serving industries which can have a significant impact on the treatment system.



STATEMENT OF NEED FOR RULEMAKING

Pursuant to ORS 183.335(7), this statement provides information on the Environmental Quality Commission's intended action to adopt a rule.

(1) Legal Authority

Oregon Revised Statutes (ORS) 468.065 authorizes the Department to adopt permit fees by rule. The fees are to be based upon the anticipated cost of filing and investigating the application, of issuing or denying the requested permit, and of an inspection program to determine compliance or noncompliance with the permit.

(2) Need for the Rule

The current permit fee schedule, which was adopted pursuant to ORS 468.065, is inadequate to cover the costs of processing permit applications and determining compliance with the water quality permits. It is proposed to modify the fee schedule to better correspond with the costs of administering the permit program and of meeting the revenue needs projected by the Governor's recommended budget.

(3) Principal Documents Relied Upon in this Rulemaking

Oregon Revised Statutes 468.065 Issuance of permits; content; fees; use.

Oregon Administrative Rules 340-45-070 Permit Fees

Oregon Administrative Rules 340-45-075 Permit Fee Schedule

Department of Environmental Quality 1991-1993 Budget Request

These documents are available for review during normal business hours at the Department's office, 811 SW Sixth, Portland, Oregon.

LAND USE COMPATIBILITY STATEMENT

Land Use Consistency

This increase in fees does not directly affect land use. It does indirectly affect Goal 6 (Air, Water and Land Resources Quality) in that the fees are used by the Department to implement the waste water permit program for regulating the discharge of pollutants and for the improvement of water quality.

**FISCAL AND ECONOMIC IMPACT****1. Other State Agencies:**

The proposed fee increases will affect other state agencies which have waste water discharge permits for non-sewage waste waters. The agency most severely impacted would be the Department of Fish and Wildlife. They have several fish hatcheries which have waste water discharge permits. In order to reduce the impact, the Department has issued a general permit which covers fish hatcheries. The fees associated with processing applications and determining compliance are much less with facilities covered by general permits than they are with facilities covered by individual permits. The proposed fee schedule will increase the annual compliance determination fees from \$30 per year per hatchery to \$100 per year per hatchery. With 40 hatcheries, this will increase their total annual fees from \$1200 to \$4000.

**2. Municipalities such as service districts, cities and counties.**

There are a few municipalities which have permits for non-sewage waste waters, such as cooling water, filter backwash, geothermal disposal, and storm water discharges. Most of these "non-sewage" activities are covered by general permits. These fees for activities covered by general permits will increase from a fee of \$50 per year to \$100 per year.

**3. Small business.**

Any small business with a waste water discharge permit for industrial discharges will be impacted by these fee increases. The annual compliance determination fees will increase about three times (from about \$250 - 400 per year to about \$450 - 1200 per year) for those facilities which must have an individual permit. If they are covered by a general permit, the annual fee will increase from \$50 per year to \$100 per year.

**4. All Businesses.**

All businesses with a permitted discharge of industrial waste water will be affected. The increase in the annual compliance determination fees will be about three times over what it is at the present time. The large complex (major) industries will pay \$6000 per year. These major industries include pulp mills and wet process hardboard, primary metals manufacturing, chemical manufacturing, and large food processing facilities. New facilities planning to locate within the state will be paying fees in the range of \$4000 to get a waste water permit if they are a minor facility and \$20,000 if they are a major facility.

The Department has tried to establish a schedule of fees which is proportional to the resources needed to process permit applications and determine compliance. The small business impact, if covered by a General Permit would be \$100 per year. If covered by an individual permit will be \$450 to \$1200 per year. This is about 3 times what it is under the existing fee schedule. The Commission may reduce or suspend the fee for a particular facility in the event of a proven hardship.

SUMMARY OF FEE SCHEDULE MODIFICATION

PERMIT APPLICATION PROCESSING FEES

	Current Fees	Proposed Fees
<u>Permit Filing Fee</u>		
All Applications	\$50	\$50
<u>Permit Processing Fee</u>		
New Applications		
Major Industry	\$2000	\$20,000
Minor Industry	600	4,000
Agricultural	300	4,000
Renewals or Modifications With Increased Discharges		
Major Industry	1000	10,000
Minor Industry	300	2,000
Agricultural	150	2,000
Renewals Without Increased Discharges		
Major Industry	500	5,000
Minor Industry	200	1,000
Agricultural	100	1,000
Modifications not Involving Permit Limits	75	500
New General Permits, by permit number:		
100, 400, 500, 600 (over 1500 yds per yr), 900, 1000	0	50
200, 300, 1300, 1400, 1500	0	100
1200	0	150

ANNUAL COMPLIANCE DETERMINATION FEES

Category (code)	Current Fees	Proposed Fees
IW-A, B, D1, E, F, H, K, L	32    \$2,000	\$6,000
IW-D2, G, J, M3	7        1,000	3,000
IW-N	129     400	1,200
IW-O	65      250	750
IW-M1	11      225	675
AG-A, IW-M2, Q	45      150	450
	Current Fees	Proposed Fees
General Permits 100 thru 500, 1000	\$50	\$100 per
General Permits 300	30	category
General Permits 900, 1200 thru 1500	80	

*Oregon Department of Environmental Quality*

## **A CHANCE TO COMMENT ON...**

**INCREASE IN WASTEWATER PERMIT FEES FOR INDUSTRIAL SOURCES**

Hearing Date: 5-17-91

Comments Due: 5-17-91

**WHO IS  
AFFECTED:**

All industrial wastewater disposal permit holders and applicants for industrial wastewater disposal permits.

**WHAT IS  
PROPOSED:**

The Department of Environmental Quality is proposing to amend OAR 340-45-075 (Permit Fee Schedule). The fees will be increased in order to generate the required projected revenue requirements of the Governor's recommended budget for the water quality industrial waste program. It is possible that the revenue requirements may be increased or decreased before the final budget is approved by the legislature.

**WHAT ARE THE  
HIGHLIGHTS:**

The annual compliance determination fees will be tripled for individual permits. They will be doubled for general permits. A small permit processing fee will be added for general permits. There will be a significant increase in permit processing fees for individual permits, especially for major and complex sources. The fee schedule will be based more closely upon actual resources used in processing the applications. Additional mining and ore processing categories have been added in the fee schedule.

The Department has used an advisory committee to review the fee schedule. It consists of industrial, environmental and state representatives. A list of persons who serve on the committee is attached.

**HOW TO  
COMMENT:**

Copies of the complete proposed rule package may be obtained from the Water Quality Division in Portland (811 S.W. Sixth Avenue) or the regional office nearest you. For further information contact Kent Ashbaker at 229-5352.

A public hearing will be held before a hearings officer at:

Time - 1:00 p.m.

Date - May 17, 1991

Place - Room 3A, Executive Building  
811 S.W. Sixth Avenue, Portland



811 S.W. 6th Avenue  
Portland, OR 97204

11/1/86

**FOR FURTHER INFORMATION:**

Contact the person or division identified in the public notice by calling 229-5696 in the Portland area. To avoid long distance charges from other parts of the state, call 1-800-452-4011.

Oral and written comments will be accepted at the public hearing. Written comments may be sent to the DEQ Water Quality Division, 811 S.W. Sixth Avenue, Portland, Oregon 97204, but must be received by no later than 5:00 p.m. May 17, 1991.

**WHAT IS THE  
NEXT STEP:**

After public hearing the Environmental Quality Commission may adopt rule amendments identical to the proposed amendments, adopt modified rule amendments on the same subject matter, or decline to act. The Commission's deliberation should come on June 14, 1991 as part of the agenda of a regularly schedule Commission meeting.

A Statement of Need, Fiscal and Economic Impact Statement, and Land Use Consistency Statement are attached to this notice.

**SUMMARY OF FEE SCHEDULE MODIFICATION**

PERMIT APPLICATION PROCESSING FEES

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Renewals Without Increased Discharges		
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Minor Industry	200	1,000
Agricultural	100	1,000
Modifications not Involving Permit Limits	75	500
New General Permits, by permit number:		
100, 400, 500, 600 (over 1500 yds per yr), 900, 1000	0	50
200, 300, 1300, 1400, 1500	0	100
1200	0	150

ANNUAL COMPLIANCE DETERMINATION FEES

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	Current Fees	Proposed Fees
General Permits 100 thru 500, 1000	\$50	\$100 per category
General Permits 300	30	
General Permits 900, 1200 thru 1500	80	

DEQ Water Quality Industrial Permit Fee Advisory Committee

Tom Krause  
Glenbrook Nickel  
P.O. Box 85  
Riddle, OR 97469  
874-3171

Richard L. Barrett  
WILLAMETTE INDUSTRIES  
P.O. Box 907  
Albany, OR 97321  
926-7771

Jean Cameron, Associate Director  
Oregon Environmental Council  
2637 S.W. Water Avenue  
Portland, OR 97201  
222-1963

R. Jerry Bollen  
Manager Environmental and Regulatory Affairs  
WEYERHAEUSER COMPANY  
Tacoma, WA 98477  
(206)924-3658  
FAX: (206)924-3658

Gabriella Lang  
Department of Economic Development  
775 Summer Street, N.E.  
Salem, OR 97310  
373-1225

Tom Donaca  
Associated Oregon Industries  
P.O. Box 12519  
Salem, OR 97309-0519  
588-0050

D'Mark Mick  
AGRIPAC, INC.  
101 S. Birdseye Avenue  
Woodburn, OR 97071  
982-3544

Larry Patterson  
ATOCHEM NORTH AMERICA, INC.  
P.O. Box 4102  
Portland, OR 97208  
225-7210



## STATEMENT OF NEED FOR RULEMAKING

Pursuant to ORS 183.335(7), this statement provides information on the Environmental Quality Commission's intended action to adopt a rule.

### (1) Legal Authority

Oregon Revised Statutes (ORS) 468.065 authorizes the Department to adopt permit fees by rule. The fees are to be based upon the anticipated cost of filing and investigating the application, of issuing or denying the requested permit, and of an inspection program to determine compliance or noncompliance with the permit.

### (2) Need for the Rule

The current permit fee schedule, which was adopted pursuant to ORS 468.065, is inadequate to cover the costs of processing permit applications and determining compliance with the water quality permits. It is proposed to modify the fee schedule to better correspond with the costs of administering the permit program and of meeting the revenue needs projected by the Governor's recommended budget.

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Department of Environmental Quality 1991-1993 Budget Request

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## LAND USE COMPATIBILITY STATEMENT

### Land Use Consistency

This increase in fees does not directly affect land use. It does indirectly affect Goal 6 (Air, Water and Land Resources Quality) in that the fees are used by the Department to implement the waste water permit program for regulating the discharge of pollutants and for the improvement of water quality.

cka/Rule.B

## FISCAL AND ECONOMIC IMPACT

### 1. Other State Agencies:

The proposed fee increases will affect other state agencies which have waste water discharge permits for non-sewage waste waters. The agency most severely impacted would be the Department of Fish and Wildlife. They have several fish hatcheries which have waste water discharge permits. In order to reduce the impact, the Department has issued a general permit which covers fish hatcheries. The fees associated with processing applications and determining compliance are much less with facilities covered by general permits than they are with facilities covered by individual permits. The proposed fee schedule will increase the annual compliance determination fees from \$30 per year per hatchery to \$100 per year per hatchery. With 40 hatcheries, this will increase their total annual fees from \$1200 to \$4000.

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There are a few municipalities which have permits for non-sewage waste waters, such as cooling water, filter backwash, geothermal disposal, and storm water discharges. Most of these "non-sewage" activities are covered by general permits. These fees for activities covered by general permits will increase from a fee of \$50 per year to \$100 per year.

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### 4. All Businesses.

All businesses with a permitted discharge of industrial waste water will be affected. The increase in the annual compliance determination fees will be about three times over what it is at the present time. The large complex (major) industries will pay \$6000 per year. These major industries include pulp mills and wet process hardboard, primary metals manufacturing, chemical manufacturing, and large food processing facilities. New facilities planning to locate within the state will be paying fees in the range of \$4000 to get a waste water permit if they are a minor facility and \$20,000 if they are a major facility.

The Department has tried to establish a schedule of fees which is proportional to the resources needed to process permit applications and determine compliance. The small business impact, if covered by a General Permit would be \$100 per year. If covered by an individual permit will be \$450 to \$1200 per year. This is about 3 times what it is under the existing fee schedule. The Commission may reduce or suspend the fee for a particular facility in the event of a proven hardship.

A Summary of Fee Schedule Modification is attached.

**SUMMARY OF FEE SCHEDULE MODIFICATION**

PERMIT APPLICATION PROCESSING FEES

	Current Fees	Proposed Fees
<u>Permit Filing Fee</u>		
All Applications	\$50	\$50
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ANNUAL COMPLIANCE DETERMINATION FEES

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AG-A, IW-M2, Q	45       150	450
		Current Fees      Proposed Fees
General Permits 100 thru 500, 1000		\$50      \$100 per
General Permits 300		30       category
General Permits 900, 1200 thru 1500		80

so provided, as may be fixed by the director, and shall be reimbursed for all expenses actually and necessarily incurred by the deputy director in the performance of the official duties of the deputy director. [1973 c.291 §2]

**Note:** 468.050 was enacted into law by the Legislative Assembly but was not added to or made a part of ORS chapter 468 or any series therein by legislative action. See Preface to Oregon Revised Statutes for further explanation.

**468.055 Contracts with Health Division.** In addition to the authority granted under ORS 190.003 to 190.110, when authorized by the commission and the Health Division, the director and the Assistant Director for Health may contract on behalf of their respective agencies for the purposes of carrying out the functions of either agency, defining areas of responsibility, furnishing services or employees by one to the other and generally providing cooperative action in the interests of public health and the quality of the environment in Oregon. Each contracting agency is directed to maintain liaison with the other and to cooperate with the other in all matters of joint concern or interest. [Formerly 449.062]

**468.060 Enforcement of rules by health agencies.** On its own motion after public hearing, the commission may grant specific authorization to the Health Division or to any county, district or city board of health to enforce any rule of the commission relating to air or water pollution or solid wastes. [Formerly 449.064]

**468.065 Issuance of permits; content; fees; use.** Subject to any specific requirements imposed by ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and this chapter:

(1) Applications for all permits authorized or required by ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and this chapter shall be made in a form prescribed by the department. Any permit issued by the department shall specify its duration, and the conditions for compliance with the rules and standards, if any, adopted by the commission pursuant to ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and this chapter.

(2) By rule and after hearing, the commission may establish a schedule of fees for permits issued pursuant to ORS 468.310, 468.315, 468.555 and 468.740. The fees contained in the schedule shall be based upon the anticipated cost of filing and investigating the application, of issuing or denying the requested permit, and of an inspection program to determine compliance or noncompli-

ance with the permit. The fee shall accompany the application for the permit.

(3) An applicant for certification of a project under ORS 468.732 or 468.734 shall pay as a fee all expenses incurred by the commission and department related to the review and decision of the director and commission. These expenses may include legal expenses, expenses incurred in processing and evaluating the application, issuing or denying certification and expenses of commissioning an independent study by a contractor of any aspect of the proposed project. These expenses shall not include the costs incurred in defending a decision of either the director or the commission against appeals or legal challenges. Every applicant for certification shall submit to the department a fee at the same time as the application for certification is filed. The fee for a new project shall be \$5,000, and the fee for an existing project needing relicensure shall be \$3,000. To the extent possible, the full cost of the investigation shall be paid from the application fee paid under this section. However, if the costs exceed the fee, the applicant shall pay any excess costs shown in an itemized statement prepared by the department. In no event shall the department incur expenses to be borne by the applicant in excess of 110 percent of the fee initially paid without prior notification to the applicant. In no event shall the total fee exceed \$40,000 for a new project or \$30,000 for an existing project needing relicensure. If the costs are less than the initial fee paid, the excess shall be refunded to the applicant.

(4) The department may require the submission of plans, specifications and corrections and revisions thereto and such other reasonable information as it considers necessary to determine the eligibility of the applicant for the permit.

(5) The department may require periodic reports from persons who hold permits under ORS 448.305, 454.010 to 454.040, 454.205 to 454.225, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and this chapter. The report shall be in a form prescribed by the department and shall contain such information as to the amount and nature or common description of the pollutant, contaminant or waste and such other information as the department may require.

(6) Any fee collected under this section shall be deposited in the State Treasury to the credit of an account of the department. Such fees are continuously appropriated to meet the administrative expenses of the program for which they are collected. The fees accompanying an application to a regional air pollution control authority pursuant to a permit program authorized by the commis-

**OREGON ADMINISTRATIVE RULES**  
**CHAPTER 340, DIVISION 45 — DEPARTMENT OF ENVIRONMENTAL QUALITY**

date of mailing of such notice unless within that time the permittee requests a hearing before the Commission or its authorized representative. Such request for a hearing shall be made in writing to the Director and shall state the grounds for the request. Any hearing held shall be conducted pursuant to the regulations of the Department. The Director may suspend or revoke an NPDES without notification by registered or certified mail if the suspension or revocation is in response to a request for such from the permittee.

(2) If the Department finds that there is a serious danger to the public health or safety or that irreparable damage to a resource will occur, it may, pursuant to applicable statutes, suspend or revoke a NPDES permit effective immediately. Notice of such suspension or revocation must state the reasons for such action and advise the permittee that he may request a hearing before the Commission or its authorized representative. Such request for a hearing shall be made in writing to the Director within 90 days of the date of suspension and shall state the grounds for the request. Any hearing shall be conducted pursuant to the regulations of the Department.

Stat. Auth.: ORS Ch. 468

Hist.: DEQ 53(Temp), f. & ef. 6-21-73 thru 10-18-73; DEQ 58, f. 9-21-73, ef. 10-25-73; DEQ 113, f. & ef. 5-10-76; DEQ 22-1981, f. & ef. 9-2-81

[ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

### **Industrial Waste Pretreatment**

**340-45-063** (1) All owners of sewerage systems which receive industrial waste subject to federal or state pretreatment standards shall develop and implement a pretreatment program for controlling those industrial contributors. The program shall be submitted to the Director for approval. Prior to approval, the Director shall provide opportunity for public comment by issuing a public notice of the receipt of a pretreatment program. Opportunity shall also be provided for a public hearing. Any person or group of persons may request or petition for a public hearing. A public hearing will be held if the owner of the affected sewerage system so requests. Also, if the Director determines that useful information may be produced thereby, or if there is significant public interest, a hearing will be held.

(2) The Director will review requests for revisions of categorical pretreatment standards to reflect removals achieved by the sewerage system. No removal credit is allowed unless approved by the Director.

(3) Both the owners of sewerage systems receiving industrial wastes and the industrial contributors shall comply with applicable pretreatment provisions of the federal Clean Water Act and the rules of the Department.

(4) Where a question exists as to whether or not an industrial contributor falls within a particular industrial subcategory, the Director shall make a written finding and shall submit it to the EPA

Regional Enforcement Division Director for a final determination, unless the Enforcement Division Director waives the receipt of the Director's determination as provided in the federal regulations. In that case the Director's determination shall be final.

(5) The owner of a sewerage system receiving industrial waste is responsible to assure that the industrial contributor meets the prohibited discharge or categorical pretreatment standards established by the United State Environmental Protection Agency or the Department, whichever is most limiting. The owner of the sewerage system may impose more stringent pretreatment standards if deemed necessary by the owner for the proper operation and maintenance of the sewerage system or disposability of the sewage sludge.

(6) The Director will review requests for Fundamentally Different Factors variances and shall either deny them or concur with them and submit the concurrence to the United State Environmental Protection Agency for approval, as provided in federal regulations.

Stat. Auth.: ORS Ch. 468

Hist.: DEQ 16-1980, f. & ef. 5-27-80

### **Other Requirements**

**340-45-065** (1) Prior to commencing construction on any waste collection, treatment, disposal, or discharge facilities for which a permit is required by rule 340-45-015, detailed plans and specifications must be submitted to and approved in writing by the Department as required by ORS 468.742; and for privately owned sewerage systems, a performance bond must be filed with the Department as required by ORS 454.425.

(2) Monitoring, recording, and reporting procedures used to meet the requirements of a NPDES permit shall conform with the Federal Act and regulations issued pursuant thereto.

Stat. Auth.: ORS Ch. 468

Hist.: DEQ 53(Temp), f. & ef. 6-21-73 thru 10-18-73; DEQ 58, f. 9-21-73, ef. 10-25-73; DEQ 113, f. & ef. 5-10-76; DEQ 126(Temp), f. & ef. 12-30-76 thru 4-28-77; DEQ 133, f. & ef. 5-2-77

[ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

### **Permit Fees**

**340-45-070** (1) Beginning July 1, 1976, all persons required to have a Water Pollution Control Facilities Permit or NPDES Waste Discharge Permit shall be subject to a three-part fee consisting of a uniform non-refundable filing fee, an application processing fee, and an annual compliance determination fee which are obtained from OAR 340-45-075. The amount equal to the filing fee, application processing fee, and the first year's annual compliance determination fee shall be submitted as a required part of any application for a new NPDES or WPCF permit. The amount equal to the filing fee and application processing fee, if

**OREGON ADMINISTRATIVE RULES  
CHAPTER 340, DIVISION 45 — DEPARTMENT OF ENVIRONMENTAL QUALITY**

applicable, shall be submitted as a required part of any application for renewal or modification of a NPDES or WPCF permit.

(2) The annual compliance determination fee, as listed in OAR 340-45-075(3), must be paid for each year a disposal system is in operation or during which a discharge to public waters occurs. The fee period shall correspond with the state's fiscal year (July 1 through June 30) and shall be paid annually during the month of July. Any annual compliance determination fee submitted as part of an application for a new NPDES or WPCF permit shall apply to the fiscal year the permitted facility is put into operation. For the first year's operation, the full fee shall apply if the facility is placed into operation on or before May 1. Any new facility placed into operation after May 1 shall not owe a compliance determination fee until the following July. The Director may alter the due date for the annual compliance determination fee upon receipt of a justifiable request from a permittee. The Commission may reduce or suspend the annual compliance determination fee in the event of a proven hardship.

(3) Modifications of existing, unexpired permits which are instituted by the Department due to changing conditions or standards, receipts of additional information or any other reason pursuant to applicable statutes and do not require refiling or review of an application or plans and specifications shall not require submission of the filing fee or the application processing fee.

(4) Upon the Department accepting an application for filing, the filing fee shall be non-refundable.

(5) The application processing fee may be refunded in whole or in part when submitted with an application if either of the following conditions exist:

- (a) The Department determines that no permit will be required.
- (b) The Department determines that the wrong application has been filed.

(6) All fees shall be made payable to the Department of Environmental Quality.

Stat. Auth.: ORS Ch. 468  
Hist.: DEQ 113, f. & ef. 5-10-76; DEQ 129, f. & ef. 3-16-77;  
DEQ 31-1979, f. & ef. 10-1-79; DEQ 18-1981, f. & ef. 7-13-81; DEQ 12-1983, f. & ef. 6-2-83

**Permit Fee Schedule**

**340-45-075 (1) Filing Fee.** A filing fee of \$50 shall accompany any application for issuance, renewal, modification, or transfer of an NPDES Waste Discharge Permit or Water Pollution Control Facilities Permit. This fee is non-refundable and is in addition to any application processing fee or annual compliance determination fee which might be imposed.

(2) **Application Processing Fee.** An application processing fee varying between \$75 and \$2,000 shall be submitted with each application. The amount of the fee shall depend on the type of facility and the required action as follows:

- (a) **New Applications:**
  - (A) Major industries<sup>1</sup> .....\$2000

- (B) Minor industries .....\$ 600
- (C) Major domestic<sup>2</sup> .....\$1500
- (D) Minor domestic .....\$ 600
- (E) Agricultural .....\$ 300

(b) **Permit Renewals (including request for effluent limit modification):**

- (A) Major industries<sup>1</sup> .....\$1000
- (B) Minor industries .....\$ 300
- (C) Major domestic<sup>2</sup> .....\$ 750
- (D) Minor Domestic .....\$ 300
- (E) Agricultural .....\$ 150

(c) **Permit Renewals (without request for effluent limit modification):**

- (A) Major industries<sup>1</sup> .....\$ 500
- (B) Minor industries .....\$ 200
- (C) Major domestic<sup>2</sup> .....\$ 500
- (D) Minor domestic .....\$ 200
- (E) Agricultural .....\$ 100

(d) **Permit Modifications (involving increase in effluent limits):**

- (A) Major industries<sup>1</sup> .....\$1000
- (B) Minor industries .....\$ 300
- (C) Major domestic<sup>2</sup> .....\$ 750
- (D) Minor domestic .....\$ 300
- (E) Agricultural .....\$ 150

(e) **Permit Modifications (not involving an increase in effluent limits): All categories .....\$ 75**

(3) **Annual Compliance Determination Fee Schedule:**

(a) **Domestic Waste Sources (Select only one category per permit) (Category, Dry Weather Design Flow, and Initial and Annual Fee):**

- (A) Sewage Disposal — 10 MGD or more .....\$1150
- (B) Sewage Disposal — At least 5 but less than 10 MGD .....\$ 900
- (C) Sewage Disposal — At least 1 but less than 5 MGD .....\$ 500
- (D) Sewage Disposal — Less than 1 MGD .....\$ 300

- (E) Non-overflow sewage lagoons .....\$ 150
- (F) Subsurface Sewage disposal systems larger than 20,000 gallons per day .....\$ 150
- (G) Subsurface sewage disposal systems larger than 5000 gallons per day but not greater than 20,000 gallons per day .....\$ 100

(b) **Industrial, Commercial and Agricultural Sources (Source and Initial and Annual Fee):**

(A) Major pulp, paper, paperboard, hardboard, and other fiber pulping industry .....\$1400

(B) Major sugar beet processing, potato and other vegetable processing, and fruit processing industry .....\$1400

(C) **Fish Processing Industry:**

- (i) Bottom fish, crab, and/or oyster processing .....\$ 175
- (ii) Shrimp processing .....\$ 175
- (iii) Salmon and/or tuna canning .....\$ 300

(D) **Electroplating industry (excludes facilities which do anodizing only):**

- (i) Rectifier output capacity of 15,000 Amps or more .....\$140
- (ii) Rectifier output capacity of less than 15,000 Amps, but more than 5000 Amps .....\$700

(For multiple sources on one application select only the one with highest fee)

DATE: April 8, 1991 .  
TO: The Environmental Quality Commission  
FROM: The DEQ Water Quality Industrial Permit Fee Advisory  
Committee  
RE: Proposed Water Quality Permit Fee Increases

Dear Chairperson Hutchison and Members of the Environmental Quality Commission:

The Advisory committee appreciated the opportunity to review the proposed fee increase schedule with Kent Ashbaker of your staff. This continues a long and important part of the relationship between the DEQ, the regulated community and the affected public by providing a forum for dialogue between those affected parties on important issues relating to the environment.

The Advisory Committee met with your staff on two occasions. In the final version of the proposed fee schedule which is before you for consideration we find, based on the charge given your staff to increase fees primarily to offset reduction in state general funds, that the proposed distribution of fees in the schedule is both a rational and fair distribution of the proposed fee increase. However, this endorsement is subject to the recommendations listed below. Further, we make no comment on fees relating to mining or to the stormwater runoff program.

The following are also the recommendations of the Advisory Committee:

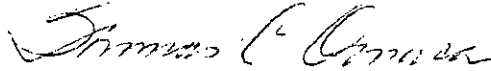
1. The DEQ should seek to retain all or a substantial portion of the lost General Funds for this program.
2. In view of the substantial increase in fees, which will be implemented mid-year, many firms will not have budgeted for such an increase. We suggest consideration of a phased approach to the implementation of proposed fees. If the full amount must be implemented, perhaps 50% in each of years one and two. If some recovery of General Funds occurs, then some different phasing should be considered.
3. As NPDES permit holders receive new permits, they are finding that more stringent standards, for such things as monitoring, are causing large increases in costs to permittees. One firm is facing a 25 times increase in their monitoring costs. Thus, not only are permit costs going up sharply, so are the costs of compliance.



4. There is a general concern about fee increases, not only because of the general increases in fees being requested by this agency, but fee increases are being proposed in many areas of both state and local government while at the same time many industries are having to cut their operating costs. Thus, before fee increases are imposed, it is suggested that the Commission review all DEQ programs, particularly discretionary ones, in a good faith effort to reduce the cost of your programs as many Oregon industries are having to do.

Again, the members of the Advisory Committee appreciate this opportunity to comment. We do understand the importance of the need to properly finance the industrial water quality section of the DEQ. The comments under "proviso's" should be understood as providing you with an understanding that there is some reluctance to fully endorse the proposed fee increase by all subject persons.

Sincerely,



Thomas C. Donaca for the  
DEQ Water Quality Industrial Permit  
Fee Advisory Committee

TD:mk

**RATIONALE FOR CHANGE IN INDUSTRIAL WASTE PERMIT FEE SCHEDULE**

PROJECTED REVENUES FROM EXISTING FEE SCHEDULE

During each year of the biennium there will be 5 major permits due for renewal and 20 minor permits. Under the current fee schedule and existing sources, the projected revenue for each year of the 1991-93 biennium is as follows:

. Annual Compliance Determination Fees - - - - -	\$173,625
Permit renewal fees for major sources (5 X 550) - -	2,750
Permit renewal fees for minor sources-(20 X 250) -	5,000
. Fees from new permit applications <sup>1</sup> - - - - -	<u>16,950</u>
Total	\$198,325

<sup>1</sup> The estimated number of new applications is based upon the record of the past 4 years, as follows:

YEAR	INDIVIDUAL PERMITS	GENERAL PERMITS
1986-87	24	51
1987-88	16	43
1988-89	23	51
1989-90	<u>25</u>	<u>66</u>
Average	22	53

The current fee schedule consists of \$50 filing fee for all permits and a \$600 processing fee for individual permits.

$$(22 \times 650 = 14,300) \text{ plus } (53 \times 50 = 2,650) = \$16,950$$

About 88 percent of all fees are from the annual compliance determination fees. Although some major increases in permit application fees should be part of the permit fee schedule, most of the increase in revenue should come from the compliance determination fees, since the majority of staff time is spent on compliance determination. The permit processing fees are not a consistent and reliable source of revenue since the permit renewals vary from year to year and new source applications cannot be predicted.

REQUIRED REVENUES IN THE GOVERNOR'S RECOMMENDED BUDGET

Revenues from permit fees required - \$664,000

This required revenue projection is 340 percent above the revenue projections associated with the current fee schedule.

Suggested strategy:

Increase annual compliance determination fees by 300 percent, except for General Permits. The annual fees for General Permits should be doubled. Make up the difference by increasing permit processing fees.

**PROPOSED FEE SCHEDULE**

Annual Compliance Determination Fees

Increase existing annual fees by 300 percent.

Category (code)	No. Sources	Current		Proposed	
		Fees	Totals	Fees	Totals
IW-A, B, D1, E, F, H, K, L	32	\$2,000	\$64,000	\$6,000	\$192,000
IW-D2, G, J, M3	7	1,000	7,000	3,000	21,000
IW-N	129	400	51,600	1,200	154,800
IW-O	65	250	16,250	750	29,250
IW-M1	11	225	2,475	675	7,425
AG-A, IW-M2, Q	<u>45</u>	150	<u>6,750</u>	450	<u>20,250</u>
Totals	289		\$148,075		\$424,725
GENERAL PERMITS <sup>2</sup>	475		<u>25,550</u>		<u>47,500</u>
			Totals \$173,625		\$472,225

<sup>2</sup> GENERAL PERMITS	No.	Current		Proposed
		Fee	Totals	
General Permits 100 thru 500, 1000	325	\$50	16,250	\$100 per category
General Permits 300	54	30	1,620	
General Permits 900, 1200 thru 1500	<u>96</u>	80	<u>7,680</u>	
Totals	475		\$25,550	<u>\$47,500</u>

**SUMMARY**

	Current Fee Schedule	Proposed Fee Schedule
Annual Fees	\$173,625	\$472,225
Application Fees	24,700	(191,775) needed
Total	\$198,325	\$664,000

This leaves a balance of \$191,775 to be raised by a revised permit application processing fee schedule.

## Permit Application Processing

Increase the permit processing fee for new permit applications to better represent the staff effort required to process the application. To do this, the amount of total hours required from all parties will be estimated and an hourly rate will be assessed to arrive at an estimated cost.

There will be a number of personnel working on each new permit with pay scales ranging from 15 to 32. To determine an average hourly wage to charge, the middle of range 26 will be used or \$2700. Adding 35% for OPE and an additional 23.1% for indirect costs will increase the salary scale to \$4487. Adding 28% for services, supplies and travel would bring it to  $\$5743 \times 12 = \$69,920$  per year. Making the necessary adjustments to account for the percentage of time an FTE would be available to do permit work (about 60%), the hourly rate would be about \$58.

The number of hours for processing a complex new application for a major source is about 700 hours, see attached time accounting sheet. The application fee for a new complex major source should, therefore, be about  $700 \times 58 = 40,600$ . However, since the permit program is still being subsidized by federal funds and some state general fund, the fee for a new major application will be established at \$20,000.

The number of hours for processing a new minor permit is estimated to be about 140 hours. The application processing fee schedule should, therefore, be in the range of  $140 \times 58 = 8120$ . The schedule will be established at \$4000.

Agricultural sources will be made the same as industrial sources.

Renewals and modifications which involve an increase in permit limits will be charged 50% of the new source fee.

The permit processing fee for renewals not involving an increase in permit limits will be 50% of those involving an increase.

Add a permit processing fee for General Permits which require some form of plan review or water quality evaluation in order to issue the permit. The fee would vary with the complexity of plans required.

### REVISED FEES

<u>Permit Filing Fee</u>	Old Fee	New Fee
All Applications	\$50	\$50
<u>Permit Processing Fee</u>		
New Applications		
Major Industry	\$2000	\$20,000
Minor Industry	600	4,000
Agricultural	300	4,000

Renewals or Modifications With Increased Discharges		
Major Industry	1000	10,000
Minor Industry	300	2,000
Agricultural	150	2,000

Renewals Without Increased Discharges		
Major Industry	500	5,000
Minor Industry	200	1,000
Agricultural	100	1,000

Modifications not Involving Permit Limits	75	500
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New General Permits, by permit number:

100, 400, 500, 600 (over 1500 yds per yr), 900, 1000	0	50
200, 300, 1300, 1400, 1500	0	100
1200	0	150

PERMIT PROCESSING FEE REVENUE PROJECTED FOR 1991-92 and 1992-93

Assume 1 new major application per year	@ 20,050	-	20,050
Assume 0 major effluent modification per year	@ -0-	-	-0-
Assume 22 new minor applications per year.	@ 4,050	-	89,100
Assume 5 minor effluent modifications per year	@ 2,050	-	10,250
Assume 20 non-effluent modification per year	@ 550	-	11,000
Assume 100 new General Permittees per year	@ 150	-	15,000
Assume 5 major renewals per year	@ 5,050	-	25,250
Assume 20 minor renewals per year	@ 1,050	-	21,000
Assume 50 General Permit renewals per year	@ 50	-	2,500
	Total		\$194,150

Estimated Fees to be generated under above assumptions.

Permit application processing fees	- - \$194,150
Annual compliance determination fees	- <u>472,225</u>
Total	\$666,375

This is very close to the projected revenue needed for the Governor's recommended budget of \$664,000. The assumptions made, included projected revenue from one new industrial major source. That may or may not happen. The assumptions did not include an increase in limits of any existing major industrial source. The projected revenue may vary one way or the other depending on the accuracy of the assumptions made. The revenue projections also do not include the expected permitting activity associated with the new EPA storm water rules. The Department will receive a number of storm water applications. There is no way to estimate that at this time. In addition, the Department currently has no staff resources to implement the storm water program so it may be necessary to go to the Emergency Board for authorization to hire limited duration fee supported positions to do that work once a better estimate of the necessary resources can be developed.

EFFORT REQUIRED FOR INDUSTRIAL PERMITS--Fee Basis

File:\fees

JET 1/4/91

	Hours of Effort Required				Study	Travel	Totals
	Analysis	Corresp.	Meetings	Report			
A. Application							
1. Initial Review	16	4	4				24
2. Impact Analysis							0
a. Surface Discharge							0
(1) WQL Stream	40	8	16		32		96
(2) Toxics	8	8	4		4		24
(3) WET	16	16	6				38
(4) Mixing Study	8	4	4		4		20
(5) Ambient Study	32	4	8		40	32	116
b. Land Discharge water/sludge							0
(1) Toxics	8	8	4				20
(2) GW Impact *	32	8	8	16	48		112
3. Permit Draft	24	8	4	40			76
B. Site Visits *,**		4				96	100
C. Consultant coord.*,**		8	6				14
D. Other							0
1. GW Variance *	40	8	8	12			68
2. DEQ Div. coord.	4		2				6
3. Other Agency Coord.		8	8			8	24
E. Public Comment ***	8	8		40		16	72
F. Permit Re-draft	8	4	4	24			40
G. EQC Reports *	16	4	2	24			46
H. Legal Support *	32	8	8	16			64
-----							
Complex NPDES Permit	252	104	84	156	80	152	828
Complex WPCF Permit	188	80	58	172	48	120	666
Minimum NPDES Permit	44	23	12	52	4	40	175
Minimum WPCF Permit	32	19	10	32	0	40	133

Meetings are at HQ, take 2 hours each; can be internal only

Correspondence is letters, memos, telephone, FAX

Travel is 16 hours per trip. Study is effort by Lab, others in DEQ.

Added support from: \*GW Section, \*\*RO, \*\*\* Public Affairs.

REQUEST FOR EQC ACTION

Meeting Date: April 26, 1991  
Agenda Item: F  
Division: Water Quality  
Section: Standards & Asses.

**SUBJECT:**

Request Authorization for Public Rulemaking Hearings on Proposed Rules Establishing the Department's Policy and Procedure for Making Instream Water Right Applications for Pollution Abatement.

**PURPOSE:**

The proposed rules define the policy and procedures by which DEQ will apply to the Water Resources Department (WRD) for instream water rights for the purpose of pollution abatement. The proposed rules implement Oregon Revised Statutes 537.332 to 537.360, which declare pollution abatement a "public use" for which WRD may issue an instream water right.

**ACTION REQUESTED:**

- Work Session Discussion
  - General Program Background
  - Potential Strategy, Policy, or Rules
  - Agenda Item \_\_\_ for Current Meeting
  - Other: (specify)

- Authorize Rulemaking Hearing
- Adopt Rules

Proposed Rules	Attachment	<u>A</u>
Rulemaking Statements	Attachment	<u>B</u>
Fiscal and Economic Impact Statement	Attachment	<u>B</u>
Public Notice	Attachment	<u>C</u>

- Issue a Contested Case Order
- Approve a Stipulated Order
- Enter an Order



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Portland, OR 97204-1390  
(503) 229-5696



- Approve Department Recommendation
- Variance Request Attachment
- Exception to Rule Attachment
- Informational Report Attachment
- Other: (specify) Attachment

**DESCRIPTION OF REQUESTED ACTION:**

Department staff request authorization from the Commission to conduct public rulemaking hearings on the proposed rules. A Notice of Public Hearing will be distributed to known interested persons, published in the Oregon Bulletin, and published in newspapers of general circulation in Oregon. The hearings are proposed to take place in Portland, Eugene, Bend and Baker City between mid-June and early July.

**AUTHORITY/NEED FOR ACTION:**

- Required by Statute: \_\_\_\_\_ Attachment   
Enactment Date: \_\_\_\_\_
- Statutory Authority: ORS 537.332-537.360 Attachment D
- Pursuant to Rule: OAR 690-77-020(3) Attachment F
- Pursuant to Federal Law/Rule: \_\_\_\_\_ Attachment
- Other: Attachment
- Time Constraints: (explain)

**DEVELOPMENTAL BACKGROUND:**

- Advisory Committee Report/Recommendation Attachment
- Hearing Officer's Report/Recommendations Attachment
- Response to Testimony/Comments Attachment
- Prior EQC Agenda Items:
  - Minutes, March 1, 1990, Work Session Agenda Item #2 Attachment E
- Other Related Reports/Rules/Statutes:
  - WRD Rules, OAR 690-77 Attachment F
- Supplemental Background Information Attachment



In 1987, the Legislature passed Senate Bill 140 (ORS 537.332 to 537.360, Attachment D), enabling the Departments of Environmental Quality, Fish and Wildlife, and Parks and Recreation to apply for instream water rights for public uses. WRD rules (OAR 690-77) on instream water rights require the agencies to adopt administrative rules approving their flow determination methodology before they may submit instream water rights applications to the Water Resources Department.

Therefore, the Commission must adopt rules if the Department intends to apply for instream water rights for the purpose of pollution abatement. The proposed rules (Attachment A) define the policies and procedures the Department will use to:

- identify where instream water rights are needed for the protection of water quality and beneficial uses,
- prioritize instream water right requests,
- determine the appropriate instream flow,
- involve the public and other agencies, and
- make application to the Water Resources Department.

The Water Resources Department and the Department of Fish and Wildlife have adopted administrative rules for the purpose of implementing instream water rights. The Parks and Recreation Department is in the process of adopting rules. In addition, the Water Resources Department and the Department of Fish and Wildlife have entered into a Memorandum of Understanding intended to foster the implementation of the instream water rights program.

A work session with the Commission was held on March 1, 1990 to provide information and discuss an approach for identifying and establishing instream water rights. The minutes of this meeting are provided in Attachment E.

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

The parties directly subject to these regulations are the Department and any agency or member of the public who will request that the Department apply for an instream water right.

Potentially affected parties include the following:

1. Public parties who benefit from instream uses of the State's waterways would benefit from instream water rights that protect water quality for those uses and

would, therefore, be positively affected by the proposed rules. These instream beneficial uses include livestock watering, anadromous fish passage, salmonid fish spawning and rearing, resident fish and aquatic life, wildlife, fishing, boating, water contact recreation, and aesthetic quality.

2. Private or public parties who would in the future apply for a water right to withdraw water from the stream and apply it to an out-of-stream beneficial use may be adversely affected by the proposed rules if instream water rights reduce the availability of water for future allocation. These parties, and existing water rights holders, may benefit if they wish to use the water for a purpose that is sensitive to its quality. Out-of-stream beneficial uses include: domestic water supply, industrial water supply, and irrigation.
3. Public or private dischargers, who would have dilution water protected for them through an instream water right, would benefit from the proposed rules. Without instream water rights for pollution abatement, streamflows and the assimilative capacity of the receiving waters could be depleted. This could result in the need to reduce or eliminate discharges to the stream, requiring additional wastewater treatment or the implementation of alternative waste management practices.

#### PROGRAM CONSIDERATIONS:

For water quality limited stream reaches receiving Total Maximum Daily Loads (TMDLs), the additional resource demands on the water quality program for instream water rights application should be relatively small. Data collection and flow analysis would be done. Additional work would involve compiling the information into a water right application, coordinating our application with the Department of Fish and Wildlife (ODFW) and the Parks and Recreation Department (Parks), and conducting the public comment process.

For Outstanding Resource Waters and other waters, more staff time would be required to complete the data collection and the flow determination analysis in addition to the steps listed above.

If necessary the Department could adopt the following two procedural policies to reduce the program resource requirements:

1. For outstanding resources waters, subject to the anti-degradation policy, the Department will apply for an instream water right for current monthly flows.
2. For waters that are not Outstanding Resource Waters and which currently meet water quality standards, the Department will apply for instream water rights upon formal request by other agencies or the public, as described in the proposed rules, and as resources allow.

It is estimated that the implementation of the proposed rules at the pace described would require approximately 0.5 FTE for the first two years and would then drop to 0.25 FTE, provided the Outstanding Resource Waters are designated and may be acted on during that two year period.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

1. Do not apply for instream water rights for pollution abatement.

The statutes do not require the Department to apply for instream water rights, they provide authorization for us to do so.

2. Apply for instream water rights only for water quality limited streams for which TMDLs are established.

An instream water right would provide some consistency and predictability to the waste load allocations, permit revisions and facility plans completed through the TMDL process. In a sense they would help to "protect" the investment of resources spent to establish permit conditions and allocations and the facilities designed to achieve them.

3. Apply for instream water rights on all water quality limited and Outstanding Resource Waters, and apply for instream water quality rights on other waters as requested by other agencies or the public.

The requests for the Department to apply for an instream water right shall be accompanied by the data and analysis necessary to determine the needed flow. The analysis must be consistent with the methodologies approved through these proposed rules.

4. Apply for instream water rights based on existing permitted loads.

This would be the simplest and least resource intensive methodology. It would allow some level of certainty that sources that currently have adequate dilution water available and discharge to receiving waters that meet water quality standards, will not see that dilution water depleted and the receiving water become water quality limited.

5. Apply for instream water rights based on existing sources, but with loads at the level they would be if all treatment criteria and the "highest and best practicable treatment and control" standard were applied.

This would not protect sources at existing discharge levels, but at levels that they will be required to achieve under existing criteria and policy in the future. This accounts for the fact that some sources are not required to upgrade their treatment facilities until their current design capacity and life and expended.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

The Department recommends that the Commission authorize the Department to hold public hearings and solicit comment on the proposed rules and the alternatives described above.

At present, alternatives #3 and 5 are the preferred alternatives, with the understanding that the pace of efforts will be determined by the resources allocated to this program.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

Instream water rights provide another tool the Department can use to maintain water quality standards for the protection of beneficial uses, and to prevent the degradation of our waters, and are thereby consistent with the primary mission of the water quality program.

Instream water rights for the purpose of pollution abatement, are inconsistent with the Clean Water Act goal of no discharge. They are not inconsistent, however, with the Commission's policy to encourage no-discharge alternatives for new sources, and to accommodate growth and development through increased efficiency and effectiveness of waste treatment and control (OAR 340-41-026), because these policies will still apply. No instream water right would exempt a discharger from these goals, and as they are achieved, instream water rights that are no longer needed may be reduced or abandoned.

ISSUES FOR COMMISSION TO RESOLVE:

1. When does a water right provide a public benefit?

An instream water right is defined as "a water right held in trust by the Water Resources Department for the benefit of the people of the State of Oregon to maintain water in-stream for public use." The rules of the Water Resources Commission state that it may reject a proposed instream water right if it finds that no significant public benefit can be gained for the intended public use. Public benefit is defined as "a benefit that accrues to the public at large rather than to a person, a small group of persons or to a private enterprise."

Water quality standards, adopted for the protection of beneficial uses, are required to be achieved regardless of flow. If sufficient flow is not present to assimilate waste loads, then dischargers would theoretically be required to reduce or eliminate their loads.

It could be argued that in the case of public sources there is a public benefit from an instream water right for pollution abatement because no-discharge or additional treatment to reduce pollutant loads in the future would likely require additional public cost.

It could also be argued that in the case of private point sources, the benefit of an instream water right would accrue to the discharger. The protection of flow for the dilution of waste would prevent the discharger from having to reduce his waste load, typically a more expensive strategy.

In reality, however, there are waters of the state that do not meet standards and do not fully support instream

beneficial uses. Non-permitted discharges, such as those from nonpoint sources are not easily controlled, and the conversion to water quality based permitting of point sources is not complete. In practice, then, instream water rights may allow the Department to more fully protect water quality for instream uses, thereby providing a true public benefit.

INTENDED FOLLOWUP ACTIONS:

1. Conduct 4 public hearings in mid-June to early July in Portland, Eugene or Roseburg, Bend and Baker or Ontario.
2. Revise the proposed rules based on testimony and additional information.
3. Return to the Commission for rule adoption in August.

Approved:

Section:

Neil J. Mullane

Division:

Lydia R. Taylor

Director:

Bill Hansen

Report Prepared By: Debra Sturdevant

Phone: 229-5289

Date Prepared: April 8, 1991

(iwr\eqc426)  
(4/8/91)

**DRAFT RULES**  
**DEPARTMENT OF ENVIRONMENTAL QUALITY**  
**INSTREAM WATER RIGHTS**

Rule Outline:

340-56-005	Purpose
340-56-015	Policy
340-56-100	Definitions
340-56-200	Selection of Receiving Waters for Instream Water Rights Application
340-56-300	Procedures of the Instream Water Rights Program
340-56-400	Flow Determination Methodology

**PURPOSE**

340-56-005

- (1) These rules provide the framework for the Department to apply to WRD for instream water rights for pollution abatement. Instream water rights provide for protection of public uses, including pollution abatement, as defined in OAR 340-56-015. The rules set the policy, definitions, procedures, and methodologies by which the Department will prioritize waterbodies for water rights application, determine the flows necessary to protect instream water quality, and apply to WRD for instream water rights to protect those flows.
- (2) The Environmental Quality Commission (EQC) has adopted numeric and narrative criteria to protect the designated beneficial uses of the state's waters. The amount of pollutants discharged to any waterbody and the amount of stream flow within the receiving stream essentially define whether a

waterbody will be in compliance with the adopted instream water quality standard. These rules identify the process whereby the Department will apply for instream water rights to maintain the streamflow necessary to assimilate the waste(s) discharged to a receiving stream.

## POLICY

340-56-015

- (1) It is the policy of the Environmental Quality Commission to apply for instream water rights for pollution abatement where such action provides a public benefit as defined in OAR 340-56-100.
- (2) This policy does not replace, exempt or diminish any existing policy, rule, standard or guideline of the Commission, or any permit condition, load allocation or wasteload allocation.
- (3) The establishment of an instream water right does not guarantee the presence of flow in the stream. Any flow-based permit condition, wasteload allocation, or other rule of the Commission shall be managed and enforced based on actual streamflows and not based on the amount of flow specified on an instream water right certificate.

## DEFINITIONS

340-56-100

- (1) "Application" means an official instream water right application developed for the Water Resources Department.
- (2) "Assimilative Capacity" means the ability of a receiving water to accept waste and still meet water quality standards.
- (3) "Biennial Water Quality Status Assessment Report" means the biennial report prepared by the Department of Environmental Quality to meet the requirements of Section 305(b) of the federal Water Quality Act.
- (4) "EQC" or "Commission" means the Oregon State Environmental Quality Commission.



- (5) "Director" means the Director of the Department of Environmental Quality.
- (6) "DEQ" or "Department" means the Oregon State Department of Environmental Quality.
- (7) "Instream Water Right" as defined in ORS 537.332(2), means a water right held in trust by the Water Resources Department for the benefit of the people of the state of Oregon to maintain water in stream for public use. An instream water right does not require a diversion or any other means of physical control over the water.
- (8) "Loading Capacity (LC)" means the greatest amount of loading that a water can receive without violating water quality standards.
- (9) "Load Allocation (LA)" means the portion of a receiving water's loading capacity that is attributed either to one of its existing or future nonpoint sources of pollution or to natural background sources. Load allocations are best estimates of the loading which may range from reasonably accurate estimates to gross allotments, depending on the availability of data and appropriate techniques for predicting loading. Wherever possible, natural and nonpoint source loads should be distinguished.
- (10) "ODFW" means the Oregon Department of Fish and Wildlife.
- (11) "Outstanding Water Resource" means those waters designated by the Environmental Quality Commission where existing high quality waters constitute an outstanding state or national resource based on their extraordinary water quality values, or where special water quality protection is needed to maintain critical habitat areas.
- (12) "Parks" means the Oregon Department of Parks and Recreation.
- (13) "Public Benefit," as defined in ORS 537.332, means a benefit that accrues to the public at large rather than to a person, a small group of persons or to a private enterprise.
- (14) "Public Uses," as defined in ORS 537.332(4), include, but are not limited to:
  - (a) Recreation;

- (b) Conservation, maintenance and enhancement of aquatic and fish life, wildlife, fish and wildlife habitat and any other ecological values;
  - (c) Pollution abatement; or
  - (d) Navigation.
- (15) "Receiving Stream" or "Receiving Water" means a water of the state into which wastes are discharged.
- (16) "Reserve Capacity" means that portion of a receiving stream's loading capacity which has not been allocated to point sources or nonpoint sources and natural background as waste load allocations or load allocations respectively. The reserve capacity includes the loading capacity which has been set aside for a safety margin and is otherwise unallocated.
- (17) "Technology Based" means a water quality regulatory program approach which relies on a defined treatment technology standard to protect water quality. This approach would establish a treatment process or technology that a source must use to comply with the water quality program.
- (18) "Total Maximum Daily Load (TMDL)" means the sum of the individual WLAs (for point sources), LAs (for nonpoint sources), background sources and reserve capacity. TMDLs are based on the loading capacity, or assimilative capacity of the receiving water. TMDLs can be expressed in terms of either mass per time, toxicity, or other appropriate measure.
- (19) "Water Quality Based" means a water quality regulatory program approach which relies on an evaluation of instream water quality conditions and the determination of the assimilative capacity of a receiving stream to establish the total maximum daily load and subsequent allocation of waste loads to pollution sources as the regulatory means of protecting water quality standards.
- (20) "Water Quality Limited" means one of the following categories:
- (a) A receiving stream which does not meet instream water quality standards during the

year or defined season even after the implementation of standard technology.

- (b) A receiving stream which achieves and is expected to continue to achieve instream water quality standard but utilizes higher than standard technology to protect beneficial uses.
  - (c) A receiving stream for which there is insufficient information to determine if water quality standards are being met with higher than standard treatment technology or where through professional judgment the receiving stream would not be expected to meet water quality standards during the entire year or defined season without higher than standard technology.
- (21) "Waste" means sewage, industrial wastes, and all other liquid, gaseous, solid, radioactive, other substances which will or may cause pollution or tend to cause pollution of any water of the state.
  - (22) "Waste Load Allocation (WLA)" means the portion of a receiving water's loading capacity that is allocated to one of its existing or future point sources of pollution. WLAs constitute a type of water-quality based effluent limitation.
  - (23) "Water Quality Standards" means the numeric and narrative criteria and designated beneficial uses identified in OAR 340-41-026 through 340-41-975.
  - (24) "WRD" means Water Resources Department.

#### SELECTION OF RECEIVING WATERS FOR INSTREAM WATER RIGHTS APPLICATION

340-56-200

- (1) The Department's priorities for instream water rights application are for receiving waters designated as
  - (a) Water Quality Limited waters as defined in 340-56-100(21)(a), or
  - (b) Outstanding Resource Waters.
- (2) The Department will also consider applying for instream water rights on other receiving waters as

requested by other agencies, local governments or the public according to the procedure described in OAR 340-56-300.

- (3) The Department will use the following criteria to determine whether to apply for an instream water right for pollution abatement:
  - (a) An instream water right would protect water quality for beneficial uses and, therefore, provide a public benefit;
  - (b) Low flows contribute to or exacerbate existing or potential water quality problems;
  - (c) No discharge alternatives for waste management have been considered and given preference over discharge as provided in OAR 340-41-026(4); and
  - (d) Existing instream water rights are not adequate to maintain sufficient flow for the assimilation of wastes.
  - (e) In the case of Outstanding Resource Waters, an instream water right would protect existing water quality, and reduced flows would contribute to or exacerbate potential degradation of those waters.

#### PROCEDURES OF THE INSTREAM WATER RIGHTS PROGRAM

##### 340-56-300

- (1) The Department has established an instream water rights program that includes a process to guide the development of instream water rights applications, and methodologies to determine the necessary flow requirements to protect water quality.
- (2) The Department will evaluate the need to establish instream water rights on Water Quality Limited receiving waters as defined in OAR 340-56-100(20)(a). All waterbodies designated Water Quality Limited (listed in the Department's Biennial Water Quality Assessment Report) will be examined to determine if they meet the criteria as listed in 340-56-100(2).
- (3) For those Water Quality Limited streams where flow needs to be protected, the Department shall

protect instream flow through this three-step approach:

- (a) **Step 1:** Upon the identification of a Water Quality Limited receiving stream in the Biennial Water Quality Status Assessment Report needing flow protection, the Department shall notify WRD that this receiving stream is violating water quality standards and request that no additional out-of-stream water rights be granted until the Department has determined whether the establishment of an instream water right is appropriate for the protection of water quality.
  - (b) **Step 2:** Within three years of a request for withdrawal from further appropriation (Step 1), the Department shall determine whether an instream water right is needed, and shall submit to WRD, along with the determination of preliminary TMDL(s), a request for reserve water in the amount needed to protect water quality standards given the current waste loads.
  - (c) **Step 3:** Upon the finalization of a TMDL(s) for a Water Quality Limited receiving stream, the Department shall prepare an instream water right application which identifies the flow levels needed to assimilate the waste load and load allocations and reserve capacity established to protect beneficial uses.
- (4) Instream water rights applications for Water Quality Limited waterbodies will be based on the level of flow needed to protect water quality as determined using the Third Level Analysis method described in OAR 340-56-400.
  - (5) The Department will evaluate the need to establish instream water rights on waterbodies designated as Outstanding Resource Waters or their tributaries. All waters designated Outstanding Resource Waters will be examined to determine if they meet the criteria listed in OAR 340-56-015.
  - (6) Instream water rights applications for Outstanding Resource Waters and any other waters not designated Water Quality Limited, will be based on the level of flow needed to protect water quality as determined using the First or Second Level Analysis methods described in OAR 340-56-400.

- (7) The initiation of an instream water right application for any waterbody may be from the Department or upon request from the public, other state or federal agency, or local government.
- (9) Any request that the Department apply for an instream water right shall demonstrate that an instream water right is needed to protect water quality, and shall address each of the criteria listed in OAR 340-56-200(3). The request shall contain the following information:
  - (a) Name of waterbody and the segment (river miles) to be protected.
  - (b) Stream flow information for at least the past 5 years and up to 10 years if available.
  - (c) Instream water quality information for at least the past 5 years and up to 10 years if available.
  - (d) Identification of beneficial uses(s) to be protected.
  - (e) Current and projected waste loads.
  - (f) Recommended flow level to maintain water quality.
  - (g) Description of need and rationale for the recommended flow.
- (10) If the instream water right application request is complete, the Department will add the proposal to the list of receiving streams for which instream water rights will be considered. If the required information is not submitted, the Department shall reject the request and identify what additional information is needed.
- (11) If the need for an instream water right is consistent with the criteria identified in OAR 340-56-015, the Department may prepare an application for submittal to WRD.
- (12) In order to request an instream water right for pollution abatement, the Department shall submit an application to WRD which includes the information specified in OAR 690-77-020.
- (13) The Department will notify the public of the draft

application and provide an opportunity for public comment.

- (14) The Department will submit the draft application to ODFW, Parks and, by request, other interested parties for a comment period not to exceed forty-five (45) days from the date of comment notice.
- (15) ODFW and Parks may incorporate the public uses for which they are responsible into a Department application for instream water rights in accordance with OAR 690-77-020.
- (16) The Department will defer to ODFW and Parks for the appropriate flow levels in those streams where higher flows are needed to provide public use needs under the jurisdiction of these agencies.
- (17) Upon notice that ODFW or Parks is requesting an instream water right, the Department may apply for an incremental instream water right in a joint application with the other agency(ies) if it is determined that additional flow is necessary to protect water quality for the beneficial uses being protected by the original request.
- (18) The final application shall be signed by the Director or the Director's designated representative and submitted to WRD.

#### FLOW DETERMINATION METHODOLOGY

340-56-400

- (1) The Department will determine the instream flow request based on stream specific analysis, and will use the highest level of analysis described below which is appropriate and for which there is adequate data.
- (2) The flow determination methodologies described in this rule are based on existing permitted discharges or pollutant loads. If an existing permit allows a load which is greater than that which would be allowed at the time of the instream water right application based on treatment criteria or the application of highest and best practicable treatment and control, the Department shall base the flow determination on the calculated loads that would be expected from the source(s) after those treatment standards are applied.

- (3) **First Level Analysis:** Compile existing water quality information for critical parameters and evaluate the concentrations relative to the quantity of water in the stream (If adequate information is available, a simple regression analysis may be used). The intent of this evaluation is to determine whether a correlation exists between stream flow and observed stream quality. If this analysis is appropriate, a stream flow condition at which quality problems are minimized can be determined.
- (4) **Second Level Analysis:** Compile existing information on pollution loading to the stream. Use dilution requirements or simplified models (e.g. Streeter-Phelps DO sag equations) based on existing data to determine the flows needed to assimilate the permitted wastewater discharges. This analysis may also include a factor for the nonpoint source discharges into the stream.
- (5) **Third Level Analysis:** Special intensive stream investigations, such as those conducted to establish Total Maximum Daily Loads (TMDLs) and Wasteload and Load Allocations. Source loading analysis is conducted to accurately identify loading from point and nonpoint sources. The assimilative capacity of the stream, based in part on streamflow, is determined and wasteloads are allocated. The loads allocated are in direct proportion to the amount of flow in a stream. Water quality modeling is typically an integral part of this intensive level of streamflow analysis.



STATEMENT OF NEED FOR RULEMAKING

Before the Environmental Quality Commission  
of the State of Oregon

1. Legal Authority

ORS 468.020 requires the Environmental Quality Commission to adopt such rules and standards as it considers necessary and proper in performing the functions vested to it by law.

ORS 469.715 requires that action be taken for preventing new pollution and abating existing pollution by requiring the use of all available and reasonable methods necessary to meet water quality standards.

ORS 537.336 grants the Department of Environmental Quality the authority to request instream water rights on the water of the state to protect and maintain water quality standards established by the Commission.

2. Need for the Rule

According to the rules of the Water Resources Commission, the Department of Environmental Quality must adopt administrative rules on flow determination methodology in order to request instream water rights. In addition, these rules are needed to define the policy of the Commission and provide a framework for the Department's process to evaluate and request instream water rights for pollution abatement.

3. Principle Documents Relied Upon

ORS 537.332 through 537.360.

The administrative rules of the Water Resources Commission, OAR 690-77-000 through 690-77-200.

EQC Work Session Agenda Item #2, March 1, 1990.

4. Land Use Compatibility Statement

The Department concludes that the proposal conforms with the following Statewide Planning Goals and Guidelines:

Goal 6 (Air, Water and Land Resources Quality): The Department believes that the proposed rules will better protect water quality resource and are therefore consistent with Goal 6.

Goal 11 (Public Facilities and Services): Instream water rights requested under the proposed rules would help to protect flow needed for dilution of discharge from public wastewater treatment facilities and potentially from stormwater runoff.

#### FISCAL AND ECONOMIC IMPACT OF THE PROPOSED INSTREAM WATER RIGHTS RULES

The proposed rules would not cause an immediate or direct economic impact to the public. The proposed rules define a process and methodology for determining flows needed for pollution abatement and applying for instream water rights. The Water Resources Department gives public notice for each water right request before the Water Resources Commission grants or rejects that request.

The instream water rights established under these rules would be junior to all existing water rights and would, therefore, not impact existing water rights holders. There could be a potential negative economic impact to parties who in the future apply for a water right for out-of-stream use if the water is no longer available.

Waste dischargers would likewise not see an immediate economic impact. There could be a potential future economic benefit, however. If the instream water right maintains dilution water in the stream which would otherwise be appropriated and withdrawn, the dischargers would be able to continue to discharge. Without that dilution water, dischargers may have to reduce, eliminate or more aggressively treat their effluent. These options are typically more expensive than discharge.

*Oregon Department of Environmental Quality*

# A CHANCE TO COMMENT ON...

PROPOSED RULES ON INSTREAM WATER RIGHTS

Notice Issued:  
Comments Due:

## WHO IS AFFECTED:

The public who benefits from instream uses of streams and lakes. Permitted municipal and industrial sources that discharge treated effluent to the surface waters of the State. Applicants for new water rights to withdraw water and apply it to an out-of-stream use.

## WHAT IS PROPOSED:

The proposed rules establish the policy and procedures by which the Department of Environmental Quality may apply to the Water Resources Department for an instream water right for the purpose of pollution abatement, the assimilation or dilution of wastewater. The rules include: the methodologies the Department may use to determine the needed flow, the priorities of the Department in applying for instream water rights, and the process by which another agency or the public may request that the Department apply for an instream water right.

## PUBLIC HEARINGS:

Public Hearings will be held before a hearing officer at:

DATE:

TIME:

PLACE:     Portland  
              Eugene  
              Bend  
              Baker City



811 S.W. 6th Avenue  
Portland, OR 97204

11/1/86

### FOR FURTHER INFORMATION:

Contact the person or division identified in the public notice by calling 229-5696 in the Portland area. To avoid long distance charges from other parts of the state, call 1-800-452-4011.

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#### HOW TO COMMENT:

Written or oral testimony may be presented at the hearings. Written comments may also be mailed to the Department of Environmental Quality, Water Quality Division, 811 SW 6th Ave., Portland, Oregon 97204. All comments must be received no later than 5:00 pm on \_\_\_\_\_.

Copies of the proposed rules may be obtained from the DEQ Water Quality Division. For additional information contact Debra Sturdevant at 229-5289, or toll free (in Oregon) at 1-800-452-4011 extension 5289.

#### WHAT HAPPENS NEXT:

The Department will review the testimony received, develop a response to comments and make revisions to the proposed rules as determined appropriate. The Environmental Quality Commission may adopt the original proposal or modified rules as a result of the testimony received, or may decline to adopt rules. The Commission will consider the proposed or revised rules at its meeting on \_\_\_\_\_.

be appropriated, and upon any land lying between such point and the lower terminus of the proposed ditch, canal or flume of the person, for the purpose of examining the same and of locating and surveying the line of such ditch, canal or flume, together with the lines of necessary distributing ditches and feeders, and to locate and determine the site for reservoirs for storing water.

**537.330 Disclosure required in real estate transaction involving water right for irrigation purposes; exception; delivery of available certificate; effect of failure to comply.** (1) In any transaction for the conveyance of real estate that includes a surface water right for irrigation purposes, the seller of the real estate shall, upon accepting an offer to purchase that real estate, also inform the purchaser in writing whether or not a certificate or certificates of water rights are available and that the seller will deliver the certificate or certificates to the purchaser at closing, if the certificate or certificates are available.

(2) Upon closing and delivery of the instrument of conveyance in a real estate transaction involving the transfer of a surface water right for irrigation purposes, the seller shall also deliver to the purchaser the certificate of water rights if the certificate is available.

(3) The failure of a seller to comply with the provisions of this section does not invalidate an instrument of conveyance executed in the transaction.

(4) This section does not apply to any transaction for the conveyance of real estate that includes a surface water right when the certificate of water rights is held in the name of a district or corporation formed pursuant to ORS chapter 545, 547, 552, 553 or 554.

(5) As used in this section, "certificate of water rights" means a certificate issued pursuant to ORS 537.250 (1) or 539.140. [1979 c.535 §4; 1981 c.448 §1]

### IN-STREAM WATER RIGHTS

**537.332 Definitions for ORS 537.332 to 537.360.** As used in ORS 537.332 to 537.360:

(1) "In-stream" means within the natural stream channel or lake bed or place where water naturally flows or occurs.

(2) "In-stream water right" means a water right held in trust by the Water Resources Department for the benefit of the people of the State of Oregon to maintain water in-stream for public use. An in-stream water right does not require a diversion or any other means of physical control over the water.

(3) "Public benefit" means a benefit that accrues to the public at large rather than to a person, a small group of persons or to a private enterprise.

(4) "Public use" includes but is not limited to:

(a) Recreation;

(b) Conservation, maintenance and enhancement of aquatic and fish life, wildlife, fish and wildlife habitat and any other ecological values;

(c) Pollution abatement; or

(d) Navigation. [1987 c.859 §2]

**537.334 Findings.** The people of the State of Oregon find and declare that:

(1) Public uses are beneficial uses.

(2) The recognition of an in-stream water right under ORS 537.336 to 537.348 shall not diminish the public's rights in the ownership and control of the waters of this state or the public trust therein. The establishment of an in-stream water right under the provisions of ORS 537.332 to 537.360 shall not take away or impair any permitted, certificated or decreed right to any waters or to the use of any waters vested prior to the date the in-stream water right is established pursuant to the provisions of ORS 537.332 to 537.360. [1987 c.859 §3]

**537.335** [Formerly 537.280; renumbered 537.330 in 1987]

**537.336 State agencies authorized to request in-stream water rights.** (1) The State Department of Fish and Wildlife may request the Water Resources Commission to issue water right certificates for in-stream water rights on the waters of this state in which there are public uses relating to the conservation, maintenance and enhancement of aquatic and fish life, wildlife and fish and wildlife habitat. The request shall be for the quantity of water necessary to support those public uses as recommended by the State Department of Fish and Wildlife.

(2) The Department of Environmental Quality may request the Water Resources Commission to issue water right certificates for in-stream water rights on the waters of this state to protect and maintain water quality standards established by the Environmental Quality Commission under ORS 468.735. The request shall be for the quantity of water necessary for pollution abatement as recommended by the Department of Environmental Quality.

(3) The State Parks and Recreation Department may request the Water Resources Commission to issue water right certificates for in-stream water rights on the waters of this state in which there are public uses relating to recreation and scenic attraction.

The request shall be for the quantity of water necessary to support those public uses as recommended by the State Parks and Recreation Department. [1987 c.859 §4; 1989 c.904 §68]

**537.338 Rules for state agency request for in-stream water right.** The Water Resources Commission by rule shall establish standards, criteria and procedures by which a state agency included under ORS 537.336 may request an in-stream water right to be issued under ORS 537.336. [1987 c.859 §5]

**537.340** [Formerly 537.290; renumbered 537.395 in 1987]

**537.341 Certificate for in-stream water right.** Subject to the provisions of ORS 537.343, the Water Resources Commission shall issue a certificate for an in-stream water right. The in-stream water right shall date from the filing of the application with the commission. The certificate shall be in the name of the Water Resources Department as trustee for the people of the State of Oregon and shall be issued by the commission according to the procedures established under ORS 537.338. The commission shall forward a copy of each certificate issued under this section to the state agency requesting the in-stream water right. [1987 c.859 §6]

**537.343 Hearing on request for in-stream water right; order.** (1) If in the judgment of the Water Resources Commission, the issuance of a certificate for an in-stream water right may impair or be detrimental to the public interest, or upon petition by any person, the commission may hold a public hearing on the request received under ORS 537.336.

(2) A hearing required under subsection (1) of this section shall be conducted in accordance with ORS 537.170.

(3) After the public hearing under subsection (2) of this section, the commission shall enter an order which may include any condition the commission considers necessary, but which is consistent with the intent of ORS 537.332 to 537.360. The order may:

(a) Approve the in-stream water right for the quantity of water requested;

(b) Approve the requested in-stream water right for a lesser quantity of water; or

(c) Reject the requested in-stream water right.

(4) If the commission reduces or rejects the in-stream water right as requested, or conditions the in-stream water right, the commission shall include a statement of findings that sets forth the basis for the reduction, rejection or conditions. The commission shall be the final authority in

determining the level of in-stream flow necessary to protect the public use.

(5) After the commission issues an order approving an in-stream water right, the commission shall issue a certificate for an in-stream water right according to the provisions of ORS 537.341. [1987 c.859 §7]

**537.345** [Formerly 537.300; renumbered 537.400 in 1987]

**537.346 Conversion of minimum perennial streamflows to in-stream water rights.** All minimum perennial streamflows established on any waters of this state before September 27, 1987, shall be converted to in-stream water rights after the Water Resources Commission reviews the streamflows and issues a certificate for an in-stream water right in accordance with ORS 537.343 with the same priority date as the minimum perennial streamflow. The provisions of ORS 536.325 shall not apply to a review conducted under this section. [1987 c.859 §8]

**537.348 Purchase, lease or gift of water right for conversion to in-stream water right; priority dates.** (1) Any person may purchase or lease an existing water right or portion thereof or accept a gift of an existing water right or portion thereof for conversion to an in-stream water right. Any water right converted to an in-stream water right under this section shall retain the priority date of the water right purchased, leased or received as a gift. At the request of the person the Water Resources Commission shall issue a new certificate for the in-stream water right showing the original priority date of the purchased, gifted or leased water right. A person who transfers a water right by purchase, lease or gift under this subsection shall comply with the requirements for the transfer of a water right under ORS 540.510 to 540.530.

(2) Any person who has an existing water right may lease the existing water right or portion thereof for use as an in-stream water right for a specified period without the loss of the original priority date. During the term of such lease, the use of the water right as an in-stream water right shall be considered a beneficial use. [1987 c.859 §9]

**537.350 Legal status of in-stream water right.** (1) After the Water Resources Commission issues a certificate for an in-stream water right under ORS 537.341 to 537.348, the in-stream water right shall have the same legal status as any other water right for which a certificate has been issued.

(2) An in-stream water right is not subject to cancellation under ORS 537.260 or 537.410 to 537.450 but an in-stream water right may be canceled under ORS 540.610 to 540.650. [1987 c.859 §10]

**537.352 Precedence of uses.** Notwithstanding any provision of ORS 537.332 to 537.343 and 537.350, the right to the use of the waters of this state for a project for multipurpose storage or municipal uses or by a municipal applicant, as defined in ORS 537.282, for a hydroelectric project, shall take precedence over an in-stream water right when the commission conducts a review of the proposed project in accordance with ORS 537.170. The precedence given under this section shall not apply if the in-stream water right was established pursuant to ORS 537.346 or 537.348. [1987 c.859 §11]

**537.354 In-stream water right subject to emergency water shortage provisions.** An in-stream water right established under the provisions of ORS 537.332 to 537.360 shall be subject to the provisions of ORS 536.700 to 536.780. [1987 c.859 §12]

**537.356 Request for reservation of unappropriated water for future economic development.** Any state agency may request the Water Resources Commission to reserve unappropriated water for future economic development. [1987 c.859 §13]

**537.358 Rules for reservation for future economic development.** The Water Resources Commission shall adopt rules to carry out the provisions of ORS 537.356. The rules shall include a provision for a review under ORS 537.170 to be conducted:

(1) At the time a reservation for future economic development is made; and

(2) At the time the reserved water is applied to consumptive use or out-of-stream use. [1987 c.859 §14]

**537.360 Relationship between application for in-stream water right and application for certain hydroelectric permits.** If an application is pending under ORS chapter 537 for a water right permit to use water for hydroelectric purposes or under ORS 543.010 to 543.620 for a hydroelectric permit or license at the time the Water Resources Commission receives an application for an in-stream water right under ORS 537.336 for the same stream or reach of the stream, the commission shall not take any action on the application for an in-stream water right until the commission issues a final order approving or denying the pending hydroelectric application. [1987 c.859 §15]

## MISCELLANEOUS

**537.390 Valuation of water rights.** In any valuation for rate-making purposes, or in any proceeding for the acquisition of rights to the use of water and the property used in connection therewith, under any license or statute of the United States or under the

laws of Oregon, no value shall be recognized or allowed for such rights in excess of the actual cost to the owner of perfecting them in accordance with the provisions of the Water Rights Act. [Formerly 537.280; and then 537.335]

**537.395 Public recapture of water power rights and properties; no recapture of other rights.** (1) Any certificate issued for power purposes to a person other than the United States, or the State of Oregon or any municipality thereof, shall provide that after the expiration of 50 years from the granting of the certificate or at the expiration of any federal power license, and after not less than two years' notice in writing to the holder of the certificate, the State of Oregon, or any municipality thereof, may take over the dams, plants and other structures, and all appurtenances thereto, which have been constructed for the purpose of devoting to beneficial use the water rights specified in the certificate. The taking over shall be upon condition that before taking possession the state or municipality shall pay not to exceed the fair value of the property taken, plus such reasonable damages, if any, to valuable, serviceable and dependent property of the holder of the certificate, not taken over, as may be caused by the severance therefrom of the property taken.

(2) The fair value of the property taken and the severance damages, if any, shall be determined by agreement between the holder of the certificate and the state or municipality, or, in case they cannot agree, by proceedings in equity instituted by the state or municipality in the circuit court of the county in which the largest portion of the property is located.

(3) The right of the state or any municipality to take over, maintain and operate any property which has devoted to beneficial use water rights specified in the certificate, by condemnation proceedings upon payment of just compensation, is expressly reserved.

(4) The provision for the recapture of any rights other than for power purposes, as provided in this section, contained in any certificate issued before June 14, 1939, shall be of no force and effect and may be canceled from the records wherever recorded and a new certificate issued with the recapture clause eliminated.

(5) The owner of any certificate issued before June 14, 1939, for such rights may, upon surrendering the certificate, receive a new certificate therefor issued under and subject to the provisions of this section. [Formerly 537.290; and then 537.340]

**537.400 Reservoir permits.** (1) All applications for reservoir permits shall be sub-

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provide background analysis and options for consideration and should provide an improved foundation for Commission direction.

**Item 2. In-Stream Water Rights: Background and Discussion of Potential for Rulemaking**

Neil Mullane briefed the Commission on legislation passed in 1987 that authorizes the State Parks Department, the Department of Fish and Wildlife, and DEQ to apply for instream water rights to maintain and support public uses within natural streams and lakes. The Department will have to adopt rules describing procedures and methodologies for determining instream flow needs before any application can be submitted to the Water Resources Department. The Department proposed to establish candidates for application by identifying streams where flows are insufficient to assimilate wastes and meet water quality standards and where other agencies have not applied for instream rights or where the stream is not withdrawn from further appropriation. Some of this work will be done in conjunction with establishment of TMDLs (total maximum daily loads). The Department will then develop the required procedural rules and expects to return to the Commission for hearing authorization in May or June. Since no funding was provided for this activity, proceeding as currently planned will require delay of other work.

The Commission expressed the view that a significant workload is involved with this project. **Director Hansen** noted that the ideal approach is to utilize the TMDL process. However, it will take many years to complete this process. The problem is to reserve the needed stream flows at the earliest date before available waters are appropriated for out of stream uses and are not available for instream uses. Thus, the Department has concluded that a 3 to 6 month delay in the TMDL process is justified in order to pursue high priority instream water rights. In response to a question from Commissioner Castle, Director Hansen noted that a delay in the TMDL process does not change the end result. However, a delay in establishment of an instream right may effectively forego the opportunity to achieve the end result of protecting instream uses. **Commissioner Castle** commented that under the circumstances, the establishment of instream rights seems more important. The Commission recognized that it will be necessary to balance the priority of establishment of instream water rights with the requirements of the consent decree for establishment of TMDLs.

**Item 3. Dioxin and Total Chlorinated Organics: Short, Medium, and Long Range Strategies; Options for Public Forum; Status of Regulatory Actions; and Columbia River TMDL Progress Report**

**Chairman Hutchison** noted that the Governor had written to the Commission and supported their actions to date and encouraged that certainty be brought to this issue in the near future. He also noted that a meeting had been held with interested participants in the process to discuss options for a public forum.



OREGON ADMINISTRATIVE RULES  
CHAPTER 690, DIVISION 77

INSTREAM WATER RIGHTS

RECEIVED  
AUG 28 1990

WATER QUALITY DIVISION  
DEPT. OF ENVIRONMENTAL QUALITY

PURPOSE

690-77-000

(1) These rules set the policy, procedures, criteria, standards and definitions for establishing instream water rights. Instream water rights provide for protection of public uses including, but not limited to recreation, scenic attraction, aquatic and fish life, wildlife habitat and ecological values, pollution abatement and navigation. The rules provide for conversion of existing minimum streamflows to instream water rights; for specified agencies to apply for new instream water rights; for purchase, gift or lease of existing water rights for use as instream water rights; and for enforcement of instream water rights which are held in trust by the Water Resources Department to protect the public uses. The rules also provide a procedure for state agencies to apply for reservations of water for future economic development.

(2) In 1987, the Legislature created a new type of water right called an instream water right. Instream water rights are established by certificate from the Water Resources Commission, pursuant to ORS 537.332 to 537.360, to maintain and support public uses within natural streams and lakes. They may also be established as a result of a water conservation project governed by OAR 690 Division 18. The instream water right differs from other water rights because it does not require any control or diversion of the water. It is held in trust by the Water Resources Department but is regulated and enforced like all other water rights. Instream water rights do not take away or impair any legally established right to the use of water having an earlier priority date than the instream right.

DEFINITIONS

690-77-010

As used in these rules:

(1) "Affected local government" means any local government, as defined in OAR 690-60-015, within whose jurisdiction the diversion, conveyance, instream or out-of-stream use, or reservation of water is proposed or established.

(2) "Commission" means the Water Resources Commission.

(3) "DFW" means the State Department of Fish and Wildlife.

(4) "DEQ" means the Department of Environmental Quality.

(5) "Department" means the Water Resources Department.

(6) "Director" means the director of the Water Resources Department.

(7) "EDD" means the Economic Development Department.

(8) "Held in trust by the Water Resources Department" means that the water right must be enforced and protected for the public uses listed in the water right. Actions by the Department affecting instream water rights are limited by public trust obligations.

(9) "Instream," as defined in ORS 537.332, means within the natural stream channel or lake bed or place where water naturally flows or occurs.

(10) "Instream water right," as defined in ORS 537.332, means a water right held in trust by the Water Resources Department for the benefit of the people of the state of Oregon to maintain water instream for public use. An instream water right does not require a diversion or any other means of physical control over the water.

(11) "Minimum streamflow," also "minimum perennial streamflow," means an administrative rule provision adopted in a basin program by the Water Resources Commission or its predecessors to implement ORS 536.235, 536.310(7) and 536.325 and support aquatic life, maintain recreation or minimize pollution.

(12) "Multipurpose storage project" means any storage project which is designed and operated to provide significant public benefits and provides for more than two beneficial uses and/or purposes.

(13) "Parks" means the Parks and Recreation Division of the Department of Transportation.

(14) "Planned" means a determination has been made for a specific course of action either by legislative, administrative or budgetary action of a public body, or by engineering, design work, or other investment toward approved construction by the private sector.

(15) "Planned uses" means the use or uses of water or land which has/have been planned as defined in this section. Such uses include but are not limited to the policies, provisions, and maps contained in acknowledged comprehensive plans.

(16) "Public benefit," as defined in ORS 537.332, means a benefit that accrues to the public at large rather than to a person, a small group of persons or to a private enterprise.

(17) "Public use," as defined in ORS 537.332, includes but is not limited to:

(a) Recreation;

(b) Conservation, maintenance and enhancement of aquatic and fish life, wildlife, fish and wildlife habitat and any other ecological values;

(c) Pollution abatement; or

(d) Navigation.

(18) "Recreation" as a public use of water means any form of play relaxation, or amusement, mostly done during leisure, that occurs in or in conjunction with streams, lakes and reservoirs, including but not limited to boating, fishing, swimming, wading, and viewing scenic attractions.

(19) "Scenic attraction" means a picturesque natural feature or setting of a lake or stream, including but not limited to waterfalls, rapids, pools, springs, wetlands and islands that create viewer

interest, fascination, admiration or attention.

(20) "Unappropriated water available" means water that exceeds the quantities required to meet existing water rights of record, minimum streamflows and instream water rights and for known and yet to be quantified Native American treaty rights.

## GENERAL PROVISIONS

690-77-015

(1) Instream water rights shall not take away or impair any permitted, certificated or decreed right to any waters or to the use of any waters vested prior to the date of the instream water right.

(2) The implementation of the instream water rights law is a means of achieving an equitable allocation of water between instream public uses and other water uses. When instream water rights are set at levels that exceed current unappropriated water available the water right not only protects remaining supplies from future appropriation but establishes a management objective for achieving the amounts of instream flows needed to satisfy the identified public uses.

(3) The amount of appropriation for out-of-stream purposes shall not be a factor in determining the amount of an instream water right.

(4) If natural streamflow or natural lake levels are the source for meeting instream water rights, the amount allowed during any identified time period for the water right shall not exceed the estimated average natural flow or level occurring from the drainage system, except where periodic flows that exceed the natural flow or level are significant for the public use applied for. An example of such an exception would be high flow events that allow for fish passage or migration over obstacles.

(5) If the source of water for an instream water right is other than natural flow such as storage releases or inter-basin transfer, the source shall be developed or a permit for development approved prior to or coincident in priority with the instream water right. The development of environmentally sound multipurpose storage projects that will provide instream water use along with other beneficial uses shall be supported.

(6) Instream water rights in rivers and streams shall, insofar as practical, be defined by reaches of the river rather than points on the river.

(7) When instream water rights are established through transfers of existing water rights, the certificate shall define the appropriate reach or reaches to which the new instream water right shall apply. Normally, a new instream water right shall be maintained downstream to the mouth of the affected stream; however, it may be maintained farther downstream if the amount of the instream water right is a measurable portion of the flow in the receiving stream.

(8) Instream water rights shall conform with state statutes and basin programs. All natural lakes and streams in the state shall be considered classified to allow all instream public uses unless specifically withdrawn from appropriation for such use.

(9) Instream water rights shall be approved only if the amount,

timing and location serve a public use or uses.

(10) The combination of instream water rights, for the same reach or lake, shall not exceed the amount needed to provide increased public benefits and shall be consistent with (4) and (5) above.

(11) An Instream water right created through the conversion of a minimum perennial streamflow shall not take precedence over any rights having an earlier priority date, including storage rights except where an individual permit or water right specifies a subordination to future use or appropriations.

(12) An instream water right created through the conversion of a minimum perennial streamflow which consists in whole or part of waters released from storage are enforceable only as to the waters released to satisfy the instream water right.

(13) Instream water rights created through the conversion of minimum perennial streamflows shall carry with them any and all conditions, exceptions or exemptions attached to the minimum perennial streamflow, unless modified through hearing.

#### AGENCY APPLICATIONS FOR NEW INSTREAM WATER RIGHTS

690-77-020

(1) Only DFW, DEQ and Parks are authorized to submit applications to the Department to establish instream water rights. Applications may be submitted at any time.

(2) To promote coordination, DFW, DEQ and Parks shall notify each other of the proposed applications prior to submittal to the Department. The applying agency should notify the other agencies of its intent to develop an instream water right application on a specified stream or lake. Notice should be given as early as possible and the other agencies should respond as soon as possible if they would like to incorporate the public uses each is responsible for into the application.

(3) After October 28, 1989, all applications for instream water rights shall be based on methods of determining instream flow needs that have been approved by administrative rule of the agencies submitting the applications.

(4) Applications to establish instream water rights shall be submitted in writing and shall include the following:

- (a) Agency(ies) applying;
- (b) Public uses to be supported;
- (c) Stream or lake name;
- (d) If a stream, the reach and stream to which it is tributary;
- (e) The appropriate section of a Department basin map with the applicable lake or stream reach identified;
- (f) Flow requested by month and year in cubic feet per second or acre-feet or lake elevation;
- (g) Methods used to determine the requested amounts;
- (h) Evidence of notification of other qualified applicant agencies;
- (i) If a multi-agency request, the amounts and times requested for each category of public use;

(j) Identification of affected local governments (pursuant to OAR 690-77-010) and copies of letters notifying each affected local government of the intent to file the instream water right application.

(5) The applicant is encouraged to propose:

(a) A means and location for measuring the instream water right;

(b) The strategy and responsibility for monitoring flows for the instream right; and

(c) Any provisions needed for managing the water right to protect the public uses.

#### PROCESSING INSTREAM WATER RIGHT APPLICATIONS

690-77-025

(1) The Department shall establish a tentative date of priority for the instream water right as of the date the application is received at the Department.

(2) Applications which do not fulfill the requirements of OAR 690-77-020 shall be returned to the applicant to correct the deficiencies. The Department shall state a time within which the applicant must complete the application. The time allowed shall be at least thirty days but not more than one year from the date the application is returned to the applicant. If the applicant fails to return a complete application to the Department within the time specified, the tentative priority date is forfeited and the application may be rejected.

(3) The Director shall provide notice of each application received to the water rights public notice list created under OAR 690 Division 11 and to affected Indian tribes and cities and to the planning department of each affected local government. The notice will:

(A) Identify applicant agency(ies);

(B) Describe the characteristics and the purpose of the proposed instream water right;

(C) Invite local planning officials to identify and provide policies or provisions in comprehensive plans relating to instream flow protection or other uses of the waters under consideration; and

(D) Offer an opportunity for local government officials to discuss the proposed instream water right with the applicant(s) and Department.

(4) The notice shall state that the Director may presume the proposed use is allowed by and compatible with not precluded by the laws and regulations of any agency or tribe that does not respond within 30 days of the date shown on the notice. In the event of a land use dispute, as defined in OAR 690-60-015 (Definitions), the Commission shall follow procedures provided in OAR 690-60-040 (Resolution of Land Use Disputes).

#### DIRECTOR REVIEW OF APPLICATIONS

690-77-030

(1) The Director shall review all completed applications and

determine whether the proposed instream water right:

(a) Satisfies the provisions of Section 690-77-015; or,  
(b) Is the subject of a request for review by a public agency or person within 30 days of notice.

(c) Does not raise any other issues that indicate that the issuance of a certificate for an instream water right may impair or be detrimental to the public interest.

(2) If (1)(a) and (c) is satisfied and if no timely petition for review under (b) above has been filed, the Director shall conclude that the application is in the public interest and shall issue the certificate.

(3) If (1)(a) or (c) is not satisfied or (b) applies the Director may work with the applicant and any person or agency who has filed a request for review to determine whether the issues can be resolved through mutually agreeable modifications or conditions, consistent with ORS 537.332 to 537.360 and OAR 690-77-015 and 045. If as a result of negotiation, the Director determines:

(a) The issues indicating that the application may impair or be detrimental to the public interest or may take away or impair any permitted, certificated or decreed right cannot be resolved through negotiation, the Director shall refer the application to the Commission with a recommendation to conduct a hearing under ORS 537.170.

(b) The negotiations have resulted in a mutually acceptable resolution of the issues, the Director may issue the certificate with appropriate conditions or modifications, or may submit the proposed certificate to the Commission for review prior to issuing the certificate.

#### COMMISSION ACTIONS

690-77-035

(1) When the Commission receives for review an application for a proposed certificate, it may:

(a) Without hearing, find that the use would not impair or be detrimental to the public interest or take away or impair any permitted, certificated or decreed right and instruct the Director to issue a certificate; or

(b) Without hearing, find that the use, appropriately conditioned in accordance with ORS 537.332 to 537.360 and OAR 690-77-015 and 030(3)(b), would not impair or be detrimental to the public interest and would not take away or impair any permitted, certificated or decreed right, and instruct the Director to issue a certificate with the appropriate conditions; or

(c) Find that the use may impair or be detrimental to the public interest or may take away or impair any permitted, certificated or decreed right and require a hearing under ORS 537.170.

(2) After the public hearing held under (1)(c) above, the Commission's final action shall be an order:

(a) To approve an instream right for the amount requested; or

(b) To approve an instream water right for a lesser quantity of water than requested and/or with conditions needed to protect the

public interest or avoid taking away or impairing any permitted, certificated or decreed right; or

(c) To reject the instream water right if it would impair or be detrimental to the public interest or would take away or impair any permitted, certificated or decreed right.

#### REQUIREMENT OF STATEMENT OF FINDINGS

690-77-040

Any order or proposed order by the Director or Commission which reduces, conditions or rejects an instream water right shall include a statement of findings that sets forth the basis for the reduction, conditioning or rejection.

#### STANDARDS FOR REVIEW OF PROPOSED INSTREAM WATER RIGHTS

690-77-045

(1) When reviewing a proposed certificate the Director and the Commission shall issue the certificate as requested except as provided in (2) through 4 and (3) below.

(2) The Commission shall meet the requirements established in OAR 690-60-045 (Standards for Goal Compliance and Compatibility with Acknowledged Comprehensive Plans) in evaluating, and taking action on, instream water right applications.

(3) The Commission shall only modify or condition the proposed instream water right if it is found to be necessary to satisfy the standard established in subsection (2) above, or to make the right conform with the general provisions in OAR 690-77-015 or ORS 537.170 as indicated by the following standards:

(a) The instream water right shall not take away or impair any permitted, certificated, or decreed right to any waters or to the use of any vested waters by altering the availability and timing of water to a user with an earlier priority date;

(b) An instream water right shall not preclude planned uses with a reasonable chance of being developed that would provide a greater benefit to the public from the use of the unappropriated water available;

(c) The cumulative total of instream water rights shall not exceed the amount needed to support public uses when the unappropriated water available could otherwise satisfy both the public uses and additional out of stream uses;

(d) An instream water right may be conditioned or modified to conserve water for a higher public purpose if the other purpose is expected to provide greater benefits to the public; and,

(e) An instream water right shall not exceed the estimated average natural flow or level if the source is from a natural streamflow or natural lake unless the higher amount is justified under OAR 690-77-015 (4).

(4) The Commission shall only reject a proposed instream water right if it finds:

- (a) The instream water right is precluded by law; or,
- (b) No significant public benefit can be gained for the intended public use; or,
- (c) A greater benefit to the public will be gained by dedicating all of the unappropriated water to another use as determined pursuant to OAR 690-60-045 (Standards for Goal Compliance and Compatibility with Acknowledged Comprehensive Plans) or by other means; or
- (d) No amount of instream water right, even with conditions, would be in the public interest.

**CONVERSION OF MINIMUM PERENNIAL STREAMFLOWS TO INSTREAM WATER RIGHTS**

690-77-050

(1) Within 21 days of the adoption of these rules, the Commission shall request publication in the Secretary of State's bulletin and shall mail to the appropriate Department mailing lists notice of proposed conversion, and a list of all existing minimum perennial streamflows established on any waters of this state prior to September 27, 1987 separated as follows:

(a) Those flows the Commission intends to convert without change to instream water rights;

(b) Those flows the Commission intends to condition with OAR 690-77-015(11) and schedule a hearing before converting to instream water rights;

(2) Any person or agency, including the Department, may request a hearing on any of the conversions proposed within 60 days of publication in the Secretary of State's bulletin or the mailing of notice.

(3) Requests for hearings shall be filed individually for specific minimum perennial streamflows and shall be substantiated by evidence that:

(a) The conversion will take away or impair permitted, certificated or decreed water rights to the same source of water and a statement of what conditions, if any, could be attached to the conversion to avoid the problems identified, or what clarifications are necessary; and/or

(b) The existing minimum perennial streamflow is not for a public use or exceeds the amounts necessary for the public use; and/or

(c) The conversion from a minimum streamflow to an instream water right would not be in the public interest.

(4) The Director shall issue an instream water right certificate for all minimum streamflows where no complete request for hearing was received. These instream water rights shall contain the priority date of the minimum streamflow from which they were created.

(5) The Director shall review all requests for hearings. The person making the request shall bear the burden of establishing the need for a hearing. After completing this review, the Director shall recommend to the Commission:

(a) To approve the conversion; or

(b) To conduct a hearing under ORS 537.170.



(6) The Commission shall act on the Director's recommendation in accordance with 690-77-045.

#### DISPOSITION OF MINIMUM PERENNIAL STREAMFLOWS

690-77-055

Following the conversion of a minimum streamflow, the Commission shall retain the original minimum streamflow until it determines through basin program amendment that no public benefit is derived by maintaining both an instream water right and a minimum streamflow.

#### PURCHASE, LEASE OR GIFTS OF EXISTING WATER RIGHTS FOR CONVERSION TO INSTREAM RIGHTS

690-77-070

(1) Any person may apply to the Commission to convert to an instream water right an existing right or a portion of a right which the applicant would acquire or has acquired through purchase, lease or gift.

(2) An application for conversion shall include the following information:

(a) Name of person requesting change, mailing address and phone number;

(b) Public use(s) for which the instream right is desired;

(c) Source of water for the existing water right including stream or lake name and county;

(d) Name of record on the certificate, decree or proof of appropriation;

(e) Name and page of decree and certificate number, if applicable;

(f) Permit number and certificate number, if applicable;

(g) Date of priority;

(h) The authorized existing use of water;

(i) Place of use, by location in the public land survey and by tax lot or by block, lot and tax lot (if applicable) in a platted subdivision;

(j) Name of deeded land owner/certificate owner and a notarized statement authorizing the transfer if the owner is not the applicant;

(k) Copy of the current recorded deed;

(l) If any encumbrances exist against the property to which the existing right is appurtenant, a notarized statement of no objection from each holder of an encumbrance;

(m) Description of the quantity of water to be transferred and map delineating the present point of diversion, the lands which are the subject of the transfer and lands if any, from the existing right that would not be subject to transfer;

(n) Recommendations, if any, for conditions on the instream water right that would avoid taking away or impairing existing permitted, certificated or decreed rights. Such conditions may include, but are not limited to the instream flow levels in cfs per month or total acre

feet, the effective reach(es) or lake levels of the instream flow, measuring locations and the strategy for monitoring the instream flow or lake level;

(o) If the water right is acquired through lease, the specified period for the lease and the method of verifying that the original water right is not being used during the period of the lease;

(p) If an instream water right exists on the same reach(es) or lake, or on portions thereof, a statement of whether the proposed conversion is intended to add to the amounts of the existing instream water rights or to replace a later priority instream right, or portion thereof, with an earlier priority right.

(3) The Director may require additional information needed to complete the evaluation of the proposed conversion.

#### PROCESSING A TRANSFER

690-77-075

Processing of the proposed transfer of a water right to an instream water right shall be pursuant to the water rights transfer rules in OAR 690 Division 15 and the following provisions.

(1) The Director shall provide notice of the proposed conversion in the weekly mailing list established under OAR Chapter 690 Division 11, and to affected Indian tribes and cities, and to the planning department of each affected local government. Additional notice shall be provided in accordance with OAR Chapter 690, Division 15.

(2) The Director shall review all applications to determine whether:

(a) The amount and timing of the proposed instream flow is allowable within the limits and use, including return flows, of the original water right; and

(b) The proposed reach(es) is(are) appropriate considering:

(A) Instream water rights shall begin at the recorded point of diversion; and

(B) Locations of return flow. Where return flows occur at a definite point, a substantial distance below the point of diversion, an instream water right may be defined by more than one reach, for example one reach from the point of diversion to the location of the return flow and another from this point to the mouth of the stream; and

(C) The location of confluences with other streams downstream of the point of diversion, which shall be considered in accordance with OAR 690-77-015 (6); and

(D) Any known areas of natural loss of streamflow to the river bed. Where an instream water right passes through an area of known natural loss several reaches may be required to incorporate the reduced flows available, in accordance with (c)(B) below.

(c) The proposed flow(s) is (are) consistent with 690-77-015(5), (6) and (9), shall provide a public benefit for an instream use, and be appropriate considering:

(A) Return flows which shall be subtracted from the instream

water right at the old point of diversion, unless the return flows occur at a definite point a substantial distance below the old point of diversion, in which case up to the entire amount of the diversion may be allowed between the point of diversion and the point(s) of return flow; and,

(B) Where an instream water right passes through an area of known natural losses these losses shall be prorated between the instream water right and the balance of the available flow.

(3) If the Director's findings under subsection (2) above are affirmative and if no protests to the transfer are filed within 20 days of the last notice in the newspaper, the Director shall approve the transfer and issue a permanent certificate or a certificate with a specific date of expiration for the instream water right. A copy of the certificate shall be mailed to the applicant and to DFW, DEQ and Parks as appropriate. The Director shall also issue a new certificate for any remaining right for the existing use. If the instream water right is time-dated, the Director shall enter an order suspending the use of the original water right during the effective period of the instream water right.

(4) If any of the Director's findings under subsection (2) above are negative or if a protest has been filed, the applicant, Director and protestants, if any, may negotiate to develop a proposed instream water right that would be satisfactory to all. The Director shall issue a certificate in the manner provided in subsection (3) above for any negotiated instream water right transfer that satisfies all parties.

(5) If under subsection (4) above the applicant or protestant choose not to negotiate, or the parties fail to reach agreement, the Director shall submit the proposed transfer to the Commission with the Director's findings under subsection (2) and a copy of any protests. The Commission shall decide:

(a) To issue the certificate with conditions as needed to prevent harm to other water right holders; or

(b) To conduct a contested case hearing to determine whether the proposed instream water right should be denied, modified or conditioned to meet the legal requirements for transferring a water right under OAR 690 Division 15.

(6) Contested cases under (5)(b) shall be heard according to the provisions of OAR 690 Division 1 and 75.

#### CANCELLATION OR WAIVING OF AN INSTREAM WATER RIGHT

690-77-080

(1) An instream water right, or portion thereof, that has not been put to a public use for five successive years in which water was available shall be conclusively presumed to be abandoned and shall be processed as follows:

(a) Upon making a preliminary finding that the instream water right has been abandoned the Director shall notify DEQ, DFW, Parks, and those persons and agencies on the Division 11 mailing lists of the Department's findings and of its intent to cancel the instream water

right. The Department shall also publish the notice in the Secretary of State's bulletin once, and in a local newspaper one day a week for two weeks;

(b) Any person may file a protest within 60 days of publication in the Secretary of State's bulletin or the local news paper;

(c) If no protest is filed in the 60 day period, the Commission shall proceed with the process outlined in ORS 540.641 (1);

(d) If a protest is filed in the 60 day period, the Commission shall proceed with the process outlined in ORS 540.641 (2).

(2) An instream water right established under ORS 537.336 through 537.338 (OAR 690-77-020) may be cancelled pursuant to ORS 540.621 only upon the written certification from the original applicant agency(ies) that the instream water right has been abandoned. Proper notification of the public shall proceed as outlined in (1)(a) above.

(3) An instream water right shall not be subject to abandonment due to non-use when water was not available.

#### DROUGHT EMERGENCY PROVISIONS

690-77-090

An instream water right established under the provisions of ORS 537.332 to 537.360 shall be subject to the provisions of ORS 536.700 to 536.730.

#### PRECEDENCE OF FUTURE USES

690-77-100

(1) The applicants for a proposed multipurpose storage project may petition the Commission to establish precedence over an instream water right created through OAR 690-77-020.

(2) An applicant for a right to use water for municipal purposes may petition the Commission to establish precedence over an instream water right created through OAR 690-77-020.

(3) A municipal applicant, as defined in ORS 537.282, for a hydroelectric project, may petition the Commission to establish precedence over an instream water right created through OAR 690-77-020.

(4) Within six months of the receipt of the petition the Department shall conduct a public hearing in accordance with ORS 537.170. The hearing and decision on precedence may occur before the final decision on the permit.

(5) After the public hearing the Commission shall enter an order to:

- (a) Approve the requested precedence; or,
- (b) Approve the requested precedence conditionally; or,
- (c) Deny the requested precedence.

(6) The Department shall also publish a statement of findings that explains the basis for the decision made in (5) above.

#### RESERVATIONS OF WATER FOR FUTURE ECONOMIC DEVELOPMENT

(1) Any state agency may request that the Commission establish a reservation of unappropriated water for future economic development. Reservations of water shall be established as a classification in a basin program and its priority shall be the date of amendment of the basin program by the Commission. The reservation shall set aside a quantity of water for specified uses which shall, when developed, have preference over all other water rights, including instream water rights, from the same source that are issued subsequent to the date the reservation is established.

(2) The Commission may approve the reservation of water for up to 20 years. The expiration date shall be specified in the amended basin program. Prior to the termination of the approved term of reservation, the applicant may apply for a time extension of up to 20 years. The proposed time extension shall be subject to all rule requirements and standards governing review of initial reservations. An approved time extension shall retain the priority date of the original reservation and be codified as an amendment to the appropriate basin program.

(3) The Commission may require review of a reservation at specified time intervals during the approved reservation time period. The Commission may require the applicant to provide evidence that the purpose, intent, and amount of the reservation still meet Division 11 public interest standards.

(4) Requests for reservations of water for future economic development shall specify or provide:

- (a) Agency name and address;
- (b) Purpose of the reservation;
- (c) Amount of water proposed to be reserved;
- (d) Source(s) of water to supply the reservation;
- (e) Whether use of the reserved water will claim natural flow or stored supplies;

(f) If the proposal is to reserve stored water, evidence that storage facilities exist and water is available, or storage facilities are authorized for funding, funded, or under construction;

- (g) Approximate season(s) of use;
- (h) Approximate location(s) of use;
- (i) Evidence that the proposal is compatible with overall basin program goals and policies;

(j) A completed land use coordination statement as provided in the Department's Land Use Planning Procedures Guide. At a minimum, the statement shall:

(A) Identify affected local governments pursuant to OAR 690-77-010;

(B) Explain the purpose of reservation;

(C) Request planning directors to identify and provide policies or provisions in comprehensive plans relating to economic development or other uses of the waters under consideration; and

(D) Offer an opportunity for local government officials to discuss the proposed reservation with the applicant(s) and the Department.

(k) Intended types of user(s) of the reserved water;

(l) Expected duration of the reservation prior to application for use of the water;

(m) Economic benefits provided;

(n) Water sources alternatives;

(o) Evidence that the proposed reservation and water use(s) will promote the maximum beneficial use of the water without waste; and

(p) Potential adverse impacts on water resources.

(5) Within 30 days of receiving a request, the Director shall notify DFW, DEQ and Parks, EDD, and the planning department(s) of affected local governments. The Director may presume the proposed use is allowed by and compatible with the laws and regulations of any agency that does not respond within 30 days of the date shown on the notice. The Director will also mail the land use coordination statement referenced in 690-77-200(j) to the planning department's of affected local governments. In the event of a land use dispute as defined in OAR 690-60-015 (Definitions), the Director or Commission shall follow procedures as provided in OAR 690-60-040 (Resolution of Land Use Disputes) shall be notified within one month of the Departments receipt of the request. A member of the Commission shall conduct a public hearing on the proposed reservation in accordance with ORS 537.170 within six months of receipt of the request. The hearing shall be conducted in the basin of the proposed reservation.

(6) A member of the Commission shall conduct a public hearing on the proposed reservation in accordance with ORS 537.170 within 180 days of receipt of the request. The hearing shall be conducted in the basin of the proposed reservation.

(7) The Director shall review the hearing record based on the standards for making a public interest determination in OAR 690 Division 11. The Director shall prepare findings and a recommendation to the Commission on the proposed reservation. The recommendation may be to:

(a) Approve the proposed reservation through amendment of the basin program classification; or

(b) Approve a reservation through amendment of a basin program classification for a lesser amount than requested because the proposed reservation would impair or be detrimental to the public interest; or

(c) Reject the proposed reservation because it would impair or be detrimental to the public interest.

(8) The Commission shall make the final determination on proposed reservations. The Commission may include any conditions deemed necessary to protect and promote the public interest.

(9) Applications for the use of reserved water shall include all information required in Division 11 to accompany the submittal of permit applications to the Department. The use of reserved water shall be reviewed to determine whether such use would adversely affect the public interest under provisions of ORS 537.170. as provided in OAR 690 Division 11, and The Commission's decision shall be based on the standards for determining public interest and issuing permits provided in Division 11 in those rules and along with those in OAR 690-77-045. In addition, the review shall consider the land use plans or policies of local jurisdictions and, if the reservation contemplates future development that is not foreseen in the plans, the Commission shall

seek concurrence of the affected local jurisdiction(s) before making the reservation.

(10) The Commission shall meet requirements established in OAR 690-60-045 (Standards for Goal Compliance and Compatibility with Acknowledged Comprehensive Plans) in evaluating, and taking action on requests for reservations.

1032g

REQUEST FOR EQC ACTION

Meeting Date: April 26, 1991

Agenda Item: G

Division: Air Quality

Section: Program Operations

SUBJECT:

Request for relief by Double Dee Lumber Company from OAR 340-30-050, Continuous Monitoring rules in the Medford-Ashland Air Quality Maintenance Area (AQMA) and Grants Pass Urban Growth Area (UGA).

PURPOSE:

Request authorization to conduct a public hearing on modifications to industrial rules for PM<sub>10</sub> emission control in the Medford-Ashland AQMA and Grants Pass UGA. The rule modification involves relieving small boiler operators (equal to or less than 35 million BTU/hr heat input), with dry boiler exhaust stacks, from Continuous Emission Monitoring (CEM) requirements for carbon monoxide (CO) and oxygen (O<sub>2</sub>).

ACTION REQUESTED:

- Work Session Discussion
  - General Program Background
  - Potential Strategy, Policy, or Rules
  - Agenda Item      for Current Meeting
  - Other: (specify)
- Authorize Rulemaking Hearing
- Adopt Rules
  - Proposed Rules
  - Rulemaking Statements
  - Fiscal and Economic Impact Statement
  - Public Notice

Attachment       
Attachment   C    
Attachment   D    
Attachment     



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Agenda Item: G  
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- Issue a Contested Case Order
- Approve a Stipulated Order
- Enter an Order  
Proposed Order Attachment
- Approve Department Recommendation
- Variance Request Attachment
- Exception to Rule Attachment
- Informational Report Attachment
- Other: (specify) Attachment

DESCRIPTION OF REQUESTED ACTION:

OAR 340-30-050, adopted on September 26, 1989, required the installation and operation of instrumentation for measuring and recording emissions and/or parameters which affect the emission of air contaminants from wood-waste fired boilers, veneer dryers, fiber dryers, and particle dryers in the Medford-Ashland AQMA and the Grants Pass Urban Growth Area. The purpose of the rule was to provide a demonstration of the extent to which the sources and the air pollution control equipment are operated at all times at their full efficiency and effectiveness so the emission of air contaminants is kept at the lowest practicable level.

The rule contains a compliance schedule for submittal of a Continuous Emission Monitoring (CEM) plan by March 26, 1990 and purchase, installation, and operation of the approved equipment within one year of Department approval of the plan.

Double Dee Lumber Company is a small facility located on the northern end of Medford's PM<sub>10</sub> nonattainment area. It has two small wood-fired boilers sized at approximately 9 and 6 million BTU per hour heat input, each with its own exhaust stack. They are currently permitted to annually emit 16.2 tons of total particulate (approximately 8.1 tons of PM<sub>10</sub>). The entire wood products industry in the AQMA is estimated to annually emit 1275 tons of PM<sub>10</sub> out of a total PM<sub>10</sub> emission inventory of 4674 tons (1985-86 baseline year). Under the existing CEM rules, Double Dee Lumber is required to continuously monitor and report monthly on their boilers' opacity, CO emissions, O<sub>2</sub> concentration, and rate of steam production. Boiler opacity is an indicator of relative particulate emissions and gives the Department, as well as the public, some assurance of optimum, and hence minimum polluting, boiler operation. Boiler CO and O<sub>2</sub> levels are indicators of combustion efficiency and are particularly useful as a surrogate to opacity when the boiler has a wet control device and opacity monitors are impractical. The

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purpose of monitoring of steam production, as well as CO emissions, is to ascertain compliance with emission limits in the source's Air Contaminant Discharge Permit (ACDP).

Double Dee Lumber Company stated, in a letter to the Department of Environmental Quality (DEQ, Department) and the Environmental Quality Commission (EQC, Commission) dated November 30, 1990, that they felt it unreasonable or impractical to require monitoring equipment that cost more than the worth of their boiler system. Because of their dual boiler and stack system, Double Dee would be required to install two opacity monitors, two steam flow meters with integration, two CO and O<sub>2</sub> monitors with a shared analyzer, and possibly a data acquisition system for data collection and report generation. They provided estimates of CEM equipment costs of \$120,000 to \$150,000, boiler system fire insurance appraisalment worth of \$114,000, and boiler system replacement cost of \$191,000.

In a subsequent letter dated February 8, 1991, Double Dee Lumber Company requested the Department and the EQC consider a rule change that grants relief to owners of small boilers (less than 35 million BTU per hour input) due to the unexpectedly burdensome cost of the CEM equipment. Double Dee also points out the lack of CEM experience or technical expertise among the small boiler operators which is required in handling the purchase, installation, or operation of the CEM equipment. They normally employ 42 hourly employees of which 35 are directly involved in production and seven are in maintenance. The seven person maintenance staff consists of a mechanic, two millwrights, an oiler, a saw filer, a planerman, and an electrician-millwright.

The Department requests Commission authorization to conduct a public hearing on modifications to industrial rules for PM<sub>10</sub> emission control in the Medford-Ashland AQMA and Grants Pass UGA. The rule modification involves relieving small boiler operators (equal to or less than 35 million BTU/hr heat input), with dry boiler exhaust stacks, from Continuous Emission Monitoring (CEM) requirements for carbon monoxide (CO) and oxygen (O<sub>2</sub>).

**AUTHORITY/NEED FOR ACTION:**

___ Required by Statute: _____	Attachment ___
Enactment Date: _____	
<u>X</u> Statutory Authority: <u>ORS 468</u> _____	Attachment ___
___ Pursuant to Rule: _____	Attachment ___

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Agenda Item: G  
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Pursuant to Federal Law/Rule: \_\_\_\_\_ Attachment \_\_\_\_\_  
 Other: \_\_\_\_\_ Attachment \_\_\_\_\_  
 Time Constraints: (explain)

**DEVELOPMENTAL BACKGROUND:**

Advisory Committee Report/Recommendation Attachment \_\_\_\_\_  
 Hearing Officer's Report/Recommendations Attachment \_\_\_\_\_  
 Response to Testimony/Comments Attachment \_\_\_\_\_  
  
 Prior EQC Agenda Items:  
    Agenda Item E, September 8, 1989,  
    EQC Meeting Industrial PM<sub>10</sub> Rules for  
    Medford-Ashland and Grants Pass. Attachment A  
  
 Other Related Reports/Rules/Statutes:  
    Recommended Rule Modification Language Attachment B  
  
 Supplemental Background Information Attachment \_\_\_\_\_

**REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:**

There are four sources in the Medford-Ashland AQMA and Grants Pass UGA which would be affected by the recommended rule modification. They are Double Dee Lumber Company in Central Point, Stone Forest Industries in White City, Croman Corporation in Ashland, and Spaulding & Son Inc. in Grants Pass. Double Dee Lumber has two small wood-fired boilers rated at 9 and 6 million BTU/hr input, Stone Forest Industries has one small wood-fired boiler rated at 35 million BTU/hr input, Croman has two small wood-fired boilers rated at 20 and 14 million BTU/hr input, and Spaulding & Son has one small wood-fired boiler rated at 30 million BTU/hr input. All four boilers have dry boiler exhaust stacks.

Based on estimates supplied by CEM vendors, the cost breakdown for a CEM system for a single wood-fired boiler with a dry exhaust stack is as follows:

CO & O <sub>2</sub> monitoring -	≈ \$50,000 - \$100,000
Opacity monitoring -	≈ \$20,000 - \$ 30,000
Data Acquisition System -	≈ \$15,000 - \$ 20,000

Meeting Date: April 26, 1991

Agenda Item: G

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The total cost estimate of \$85,000 to \$150,000 includes equipment purchase, installation, specification testing, certification, and other related expenses. The cost of on-going maintenance/operation is not included in these figures. The range of values primarily reflects choice of vendor and sophistication of equipment. Sources such as Double Dee Lumber and Croman Corporation with two boilers will be near the upper end of this range. Through selection of less sophisticated monitoring equipment, sources may be able to reduce their initial costs but most likely increase their maintenance costs in the long term.

According to a cost estimate from Double Dee Lumber Company, the cost of their CEM system is greater than the value of their existing boiler system and the cost of replacing the existing boiler system would be even greater than the cost of the CEM system.

A rule modification requiring monitoring of opacity and steam production and source testing every third year for particulate and gaseous pollutants would result in CEM costs for an average boiler installation of approximately \$35,000 to \$50,000 and periodic source test costs of approximately \$4,000 to \$5,000. This may be compared to the CEM costs of the large boiler systems of approximately \$85,000 to \$150,000.

#### PROGRAM CONSIDERATIONS:

Continuous Emission Monitoring is targeting two primary pollutants from wood-fired boilers in the Medford-Ashland and Grants Pass areas, opacity and carbon monoxide; the opacity being an indicator of relative particulate emissions and the carbon monoxide being an indicator of CO emissions and, along with oxygen, being an indicator of combustion efficiency. Combustion efficiency is important as a surrogate to opacity when the boiler has a wet control device and installation of an opacity monitor is impractical.

All four sources affected by this proposed rule revision have dry exhaust stacks and will have opacity monitors installed as an indicator of PM<sub>10</sub> emissions. Therefore the Department's proposal will have no effect on PM<sub>10</sub> emissions.

The impact of the four affected sources on the Medford-Ashland CO non-attainment areas is insignificant. Boiler emissions are a distant third place contributor behind auto emissions and woodstoves, the four affected sources are small

in size and not located in near proximity to the CO non-attainment area. Therefore the Department's proposal will have no effect on the CO nonattainment area.

The impact of the four affected sources on any PM<sub>10</sub> non-attainment areas is also minor. The four sources are currently allowed to annually emit a total of approximately 127 tons of total particulate matter (approximately 82 tons of PM<sub>10</sub>) while the entire wood products industry in the AQMA is estimated to annually emit 1275 tons of PM<sub>10</sub> in the 1985-86 baseline year out of a total PM<sub>10</sub> emission inventory of 4674 tons.

Concern over efficient boiler operation or maintenance of the boilers would be addressed with proposed source testing requirements.

The major consideration for the Department is ensuring compliance with industrial PM<sub>10</sub> emission limits in the Medford-Ashland AQMA and the Grants Pass UGA. The Department proposed rule modification, if approved, should not jeopardize that goal and should have no environmental impact.

The Department has discussed this proposal with EPA but they have not clarified their position at this time.

**ALTERNATIVES CONSIDERED BY THE DEPARTMENT:**

1. No action, require compliance with the CEM rule as it is written. This alternative would most likely result in either noncompliance and subsequent enforcement action or a shutdown of at least Double Dee Lumber Company and possibly other small boiler operators.
2. Rulemaking action granting some relief to small boiler operators through relaxation of CO and O<sub>2</sub> monitoring requirements and the addition of source testing requirements.
3. Rule variance for Double Dee Lumber Company granting additional time to comply with the CEM rule as written.

**DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:**

The Department recommends alternative 2, modification of the CEM rule to exclude the small boiler operators (equal to or less than 35 million BTU/hr) from CO and O<sub>2</sub> monitoring and the addition of provisions for source testing of the small boilers.

The Department believes the added financial burden of CO and O<sub>2</sub> CEM equipment on the small boiler operator is not warranted by the value of the information gathered or improvements in boiler control resulting from availability of the data. Each of the four affected sources are not contributors to CO problems and they all have dry boiler exhaust stacks enabling opacity monitoring as a way of regulating PM<sub>10</sub> emissions.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

The proposed rule modifications are consistent with the Department's proposed strategy for controlling industrial PM<sub>10</sub> emissions, as part of the State Implementation Plan, without unduly interfering with economic development. The Department is not aware of any conflicts between the proposed rules and agency or legislative policies.

ISSUES FOR COMMISSION TO RESOLVE:

1. Should the minor sources of PM<sub>10</sub> emissions be subject to the same continuous monitoring requirements as the larger sources of PM<sub>10</sub> emissions regardless of cost of CEM equipment and location of the sources?

The smaller boiler operators are apparently facing CEM equipment costs equivalent to the larger boiler operators and in cases such as Double Dee Lumber Company and Croman Corporation with two boilers, the costs are higher than some of the larger boiler operators. Also, all four affected sources have no contribution to the CO non-attainment areas and they all have dry stacks enabling the installation of opacity monitors as an indicator of PM<sub>10</sub> emissions.

2. If minor sources are exempted from future rulemaking actions, what criteria should the Department use in determining exemptions?

Double Dee Lumber proposes using a source specific cost impact analysis type of criteria which may be appropriate from industry's viewpoint but resource prohibitive from the Department's viewpoint. The Department currently considers industry-wide cost impact, size of source, and location of source. During rulemaking for CEM equipment, the Department mostly heard testimony from people requesting more emission monitoring than the Department was proposing. Small

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boiler operators failed to provide any testimony, as a group, concerning the impact or usefulness of CO and/or O<sub>2</sub> CEM monitoring.

3. Is Double Dee's request for rule change best handled through a rule modification or through the variance process?

The Department believes the request is best handled through rule modification rather than variance request. The cost impact of CO and O<sub>2</sub> CEM equipment on the small boiler operators and the usefulness of the data gathered from the small boiler operators should not significantly change over time.

INTENDED FOLLOWUP ACTIONS:

1. The Department will initiate rulemaking proceedings by conducting a public hearings on the proposed rule modification.
2. The Department will incorporate any new industrial requirements resulting from this rulemaking process into the Air Contaminant Discharge Permits for each affected source.

Approved:

Section: 

Division: Steve Greenwood

Director: Bill Heun

Report Prepared By: John J. Ruscigno

Phone: 229-6480

Date Prepared: 4/5/91

JJR:a  
PO\AH12348  
April 5, 1991



## Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

### REQUEST FOR EQC ACTION

Meeting Date: September 8, 1989  
 Agenda Item: E  
 Division: Air Quality  
 Section: Program Planning

#### SUBJECT:

Industrial PM<sub>10</sub> Rules for Medford-Ashland and Grants Pass.

#### PURPOSE:

To consider adoption of new industrial rules that were taken to public hearings in January 1989.

#### ACTION REQUESTED:

- Work Session Discussion
  - General Program Background
  - Potential Strategy, Policy, or Rules
  - Agenda Item  for Current Meeting
  - Other: (specify)
  
- Authorize Rulemaking Hearing
- Adopt Rules
 

Proposed Rules	Attachment <u>A</u>
Rulemaking Statements	Attachment <u>B</u>
Fiscal and Economic Impact Statement	Attachment <u>B</u>
Public Notice	Attachment <u>C</u>
  
- Issue a Contested Case Order
- Approve a Stipulated Order
- Enter an Order
 

Proposed Order	Attachment <u>    </u>
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- Approve Department Recommendation
 

<input type="checkbox"/> Variance Request	Attachment <u>    </u>
<input type="checkbox"/> Exception to Rule	Attachment <u>    </u>
<input type="checkbox"/> Informational Report	Attachment <u>    </u>
<input type="checkbox"/> Other: (specify)	Attachment <u>    </u>



Meeting Date: September 7, 1989  
Agenda Item:  
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DESCRIPTION OF REQUESTED ACTION:

The proposed industrial rules for control of PM<sub>10</sub> (particulate matter ten microns or smaller) would:

1. Require more effective controls for plywood veneer driers and large wood-fired boilers in the Medford-Ashland and Grants Pass areas;
2. Increase the particulate emission offset ratio, requiring 1.3 (instead of 1.0) pounds of reduction in existing emissions for every one pound of new emissions in the Medford-Ashland area; and
3. Require additional source testing and continuous emissions monitoring in the Medford-Ashland and Grants Pass areas.

AUTHORITY/NEED FOR ACTION:

<input type="checkbox"/> Required by Statute: _____	Attachment _____
Enactment Date: _____	
<input checked="" type="checkbox"/> Statutory Authority: <u>ORS 468.020, 468.280</u> <u>468.295, and 468.305</u>	Attachment _____
<input type="checkbox"/> Pursuant to Rule: _____	Attachment _____
<input checked="" type="checkbox"/> Pursuant to Federal Law/Rule: <u>Clean Air Act</u> <u>and EPA Ambient PM<sub>10</sub> Air Quality Standards</u>	Attachment _____
<input type="checkbox"/> Other: _____	Attachment _____
<input checked="" type="checkbox"/> Time Constraints:	

The U.S. Environmental Protection Agency (EPA), under the provisions of the Clean Air Act, has required the Department of Environmental Quality (Department/DEQ) to submit State Implementation Plan (SIP) revisions for the Medford-Ashland and Grants Pass areas. The proposed industrial rules are key components of the PM<sub>10</sub> control strategies for these areas. Completion of the overall control strategies have been delayed due to the failure of the Department's woodstove bill to pass the Oregon Legislature. Draft control strategies may be completed by December 1989 depending on EPA clarification of its requirements, commitments that can be obtained from local governments, and possible Clean Air Act amendments.

DEVELOPMENTAL BACKGROUND:

<input type="checkbox"/> Advisory Committee Report/Recommendation	Attachment _____
<input checked="" type="checkbox"/> Hearing Officer's Report/Recommendations	Attachment <u>D</u>
<input checked="" type="checkbox"/> Response to Testimony/Comments	Attachment <u>E</u>

Meeting Date: September 7, 1989  
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- X Prior EQC Agenda Items:  
     November 4, 1988, EQC Agenda Item H                      Attachment F  
 \_\_\_ Other Related Reports/Rules/Statutes:                      Attachment \_\_\_  
 \_\_\_ Supplemental Background Information                      Attachment \_\_\_

Existing PM<sub>10</sub> Levels. The design values (or baseline PM<sub>10</sub> concentrations during 1984-87) in micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) are summarized in the table below.

<u>Group I Area</u>	<u>Approximate Design Value (<math>\mu\text{g}/\text{m}^3</math>)</u>	
	<u>Annual</u>	<u>Peak Day</u>
Medford-White City	55-65	260-370
Grants Pass	45-55	180-220
(Standard)	(50)	(150)

Emission Inventories. Residential woodsmoke from stoves and fireplaces, soil and road dust, and the wood products industry are the major PM<sub>10</sub> source categories within the Medford-Ashland Air Quality Maintenance Area and Grants Pass Urban Growth Area as summarized in the following table. Soil and road dust is not of as much health concern as woodsmoke or industry emissions and is generally more difficult to control.

<u>Source Category</u>	<u>Percent of PM<sub>10</sub> Emission Inventory</u>			
	<u>Annual PM<sub>10</sub></u>		<u>Worst Day PM<sub>10</sub></u>	
	<u>MA*</u>	<u>GP*</u>	<u>MA*</u>	<u>GP*</u>
Residential woodsmoke	41	34	65	53
Wood products industry	21	34	13	21
Soil and road dust	24	19	14	16
Motor vehicle exhaust	7	12	4	8
Other	<u>7</u>	<u>1</u>	<u>4</u>	<u>2</u>
TOTAL	100	100	100	100

\* MA = Medford-Ashland, GP = Grants Pass.

In Medford, the worst day PM<sub>10</sub> concentrations must be reduced by about 50% to meet the daily PM<sub>10</sub> health standard; annual average PM<sub>10</sub> concentrations must be reduced by about 20% to meet the annual standard. The Jackson County Woodburning Task Force targeted reductions in residential woodsmoke emissions of 70-75% on worst days, and 50-60% annual average, in order to meet the PM<sub>10</sub> health standards. The Department has targeted an additional 20% reduction in industrial emissions (on worst days and annual average) which would be accomplished by the proposed industrial rules.

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In Grants Pass, the worst day PM<sub>10</sub> concentrations must be reduced by about 20% to meet the daily PM<sub>10</sub> health standard; the Grants Pass area marginally meets the annual average PM<sub>10</sub> standard. The Department has targeted a 56% reduction in industrial emissions (on worst days and annual average) which would be accomplished by the proposed industrial rules. The industrial reduction is greater in Grants Pass than in Medford-Ashland since many industrial controls were required in Medford-Ashland during 1978-83 that were not required in other areas of Oregon. The industrial reductions, combined with a 10-20% reduction in residential woodburning emissions, should be adequate to meet the PM<sub>10</sub> standards in Grants Pass.

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

The testimony from public hearings in Medford and Grants Pass in January 1989 is summarized in Attachments D and E. Most of the testimony was generally in favor of the proposed new industrial rules but two of the specific proposals were much debated: (1) The more restrictive offset requirements; and (2) The increased source testing and continuous emission monitoring requirements.

Regarding offsets, many commentators recommended even more restrictive offset requirements than proposed, but some commentators recommended no change from the current rules (less restrictive than proposed). Regarding monitoring, many supported more detailed monitoring requirements and shorter installation schedules than proposed, while some cautioned that equipment is not currently available for some monitoring applications and the proposed installation schedules are generally too short.

Most commentators stressed the need to control all PM<sub>10</sub> sources, not just the industrial sources that are the subject of the proposed rules. Industrial representatives reviewed past pollution control efforts of the wood products industry and indicated the willingness of industry to do its part in the overall PM<sub>10</sub> control effort.

PROGRAM CONSIDERATIONS:

The industrial PM<sub>10</sub> reductions resulting from the proposed rules will not be enough to meet the ambient air quality standards in the PM<sub>10</sub> problem areas; substantial reductions in residential woodburning emissions, and possibly other emission sources, will also be needed.

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A comprehensive residential woodburning bill, Senate Bill 422, that would have provided the framework and financial incentives for woodstove emission reductions failed to pass the 1989 Oregon Legislature. The residential components of the PM<sub>10</sub> control strategy continue to be largely dependent on the cooperation of local governments and the adoption of local ordinances; the residential components will be brought to the Commission when the necessary coordination and negotiation with local governments are completed.

On August 17, 1989, the Medford City Council directed city staff to draft an ordinance to curtail the use of woodstoves and fireplaces during stagnant air conditions. Implementation is expected by November 1, 1989. The Department is encouraged by Medford's leadership to effectively address the residential woodburning emissions. Medford staff intend to coordinate the draft ordinance with the other local governments in Jackson County.

Clean Air Act amendments, expected later this year or next year, may also affect the scope and schedule of PM<sub>10</sub> control strategies.

There is little further PM<sub>10</sub> control, beyond that contained in the proposed rules, that could reasonably be applied to industry. Therefore, delaying action until the complete strategy is in place may significantly delay potential progress in reducing PM<sub>10</sub> levels in the communities.

In addition to the costs to industry (equipment, installation, operation, and maintenance), the proposed industrial rules will also require substantial Department resources to implement. Southwest Region and Air Quality Division staff will be involved with plan reviews, negotiations of site-specific continuous monitoring installations, permit modifications to incorporate the new requirements, field inspections, monitoring report reviews, and source-test reviews and followup.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

1. Adopt the new industrial rules as proposed (with clarifications and minor corrections recommended in public hearing testimony) by the Department.
2. Adopt the new rules with more stringent requirements than proposed based on public hearing testimony:

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- a. establish a moratorium on the use of offsets in the Medford-Ashland area until attainment of the PM<sub>10</sub> standards (essentially a growth moratorium on new industrial sources);
  - b. increase the offset ratio to 1.3:1 state-wide, not just in the Medford-Ashland area as proposed;
  - c. incorporate additional details on the specific types of continuous emission monitoring and data reporting into the rules;
  - d. shorten the implementation schedule for continuous emission monitoring;
  - e. require all large wood-fired boilers in the Medford-Ashland AQMA to meet the new emission standards by a certain date, rather than upon powerhouse modernization or expansion; and/or
  - f. include correspondingly tighter opacity limits for the new boiler and veneer drier emission standards.
3. Adopt the new rules with less stringent requirements than proposed based on public hearing testimony:
    - a. keep the existing 1:1 offset ratio and net air quality benefit requirement rather than the proposed 1.3:1 offset ratio;
    - b. modify the offset ratio to 1.2:1 (and keep the net air quality benefit requirement), rather than the proposed 1.3:1 offset ratio; and/or
    - c. extend the implementation schedule for continuous emission monitoring.
  4. Postpone adoption and/or retain existing rules.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

The Department recommends the adoption of the proposed rules with clarifications and minor revisions recommended in the public hearing and with modifications 2c, 2d, 2e, 2f, and 3b:

- 2c. incorporate additional details on the specific types of continuous emission monitoring and data reporting into the rules;

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- 2d. shorten the implementation schedule (in cases of straightforward monitoring applications) for continuous emission monitoring;
- 2e. require all large wood-fired boilers in the Medford-Ashland AQMA to meet the new emission standards by a certain date, or upon powerhouse modernization or expansion, whichever occurs first;
- 2f. include correspondingly tighter opacity limits for the new boiler and veneer drier emission standards unless a permittee can demonstrate by source test that the emission standards can be met at higher opacities; and
- 3b. modify the offset ratio to 1.2:1 (and keep the net air quality benefit requirement), rather than the proposed 1.3:1 offset ratio.

The rationale for these modifications is discussed in some detail in the public hearing issues/responses in Attachment E and summarized here:

- 2c. Additional details on the minimum types of continuous emission monitoring and data reporting are incorporated into the rules as requested by hearing testimony in order to clarify the intent of these requirements. The Department will establish a continuous emission monitoring working group to address case-specific monitoring needs. See Issues 22, 27 and 30 in Attachment E and the proposed changes to OAR 340-30-050 in Attachment A.
- 2d. The installation and operation of some continuous emission monitoring systems should be straightforward and can be implemented in a shorter timeframe than initially proposed by the Department. See Issue 27 in Attachment E and the proposed changes to OAR 340-30-050 in Attachment A.
- 2e. There is no guarantee that the expected boiler modernization projects will occur within a known time period. In order to insure that the boiler emission reductions will contribute to the overall PM<sub>10</sub> control plan, the Department has modified the proposal to require all large wood-fired boilers in the Medford-Ashland AQMA to meet the new emission standards within the next five years, or upon powerhouse modernization or expansion, whichever occurs first. This is proposed as a balance between: (1) a time frame short enough to be eligible for tax credits and consistent with the PM<sub>10</sub>

deadlines under consideration in Congress; and (2) a time frame long enough to allow integration with other plant modernization schedules and thus better cost-effectiveness. See Issue 15 in Attachment E and the proposed changes to OAR 340-30-046 in Attachment A.

- 2f. The most recent source testing results and visible emission observations indicate that correspondingly tighter opacity limits are appropriate for the new boiler and veneer drier emission standards. The Department has included a provision for adjustment of visible opacity limits if a permittee can demonstrate by source test that the emission standards can be met at higher opacities. See Issues 16 and 21 in Attachment E and the proposed changes to OAR 340-30-015 and -020 in Attachment A.
- 3b. An offset ratio of 1:1 or more with a net air quality benefit requirement is consistent with EPA requirements for new source review. The EPA Emission Trading Policy Statement finalized in December 1986, which is primarily a policy for existing-source bubbles, requires a reduction of 20 percent (that is, an offset ratio of 1.2:1) from baseline emissions for emission trades involving existing-source bubbles in nonattainment areas. In order to be consistent with this national policy, even though not required by EPA for new sources, the Department has modified the proposal to require an offset ratio of 1.2:1 which is more restrictive than the existing 1:1 requirement but slightly less restrictive than the 1.3:1 initial proposal. See Issues 36 and 37 in Attachment E and the proposed changes to OAR 340-30-110 in Attachment A.

The Department believes that the modified proposal is a reasonable and effective package of industrial control measures that will be an important part of the overall PM<sub>10</sub> control strategies for the Medford-Ashland and Grants Pass areas.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

The proposed rules are consistent with the Department's proposed strategy for controlling industrial PM<sub>10</sub> emissions, as part of the State Implementation Plan, without unduly interfering with economic development. The Department is not aware of any conflicts between the proposed rules and agency or legislative policies.

ISSUES FOR COMMISSION TO RESOLVE:

1. Should the new industrial rules be adopted and implemented before the adoption of commitments to insure adequate reductions in residential woodburning emissions? Or should the adoption of the new Medford-Ashland industrial rules be postponed until residential woodburning commitments are adopted by local governments?

Substantial reductions in both industrial and residential PM<sub>10</sub> emissions will be needed to meet the ambient air quality standards for PM<sub>10</sub> in the Medford-Ashland area. Most of the particulate reductions over the last decade have been the result of tighter industrial requirements for the Medford-Ashland area.

Reasonable additional industrial control measures are proposed that would further reduce particulate emissions even if residential woodburning control measures are delayed and PM<sub>10</sub> health standards are not met on schedule.

2. Should an industrial growth moratorium be imposed or should the industrial offset requirements be more restrictive?

The major problem with the existing particulate strategy (for total suspended particulate, or TSP) was not related to industry but rather the failure to implement residential woodburning control measures (curtailment of woodstoves and fireplaces during pollution episodes, and weatherization of woodheated homes).

The modified proposal for a 1.2:1 offset ratio will better insure that the net air quality benefit requirement is met for offset transfers in the Medford-Ashland area.

INTENDED FOLLOWUP ACTIONS:

1. The Department will incorporate any new industrial requirements into the specific air contaminant discharge permits for each affected source.
2. For continuous emission monitoring systems (CEMS), the Department will form a CEMS working group including representatives of the affected industries, DEQ/LRAPA, monitoring equipment vendors, and/or source-testing consultants. The purpose of the group will be to



Meeting Date: September 7, 1989  
Agenda Item:  
Page 10

identify the most useful and appropriate CEMS for existing sources not already addressed in the EPA CEMS requirements for new sources.

3. Depending on progress to develop local woodburning ordinances, the Department expects to draft the overall PM<sub>10</sub> control plans by the end of 1989. In order to be approvable by EPA, the PM<sub>10</sub> control plans must include the local ordinances, state industrial rules, and other commitments necessary to meet PM<sub>10</sub> standards. If the draft plan is approvable by EPA, the Department intends to request the Environmental Quality Commission to authorize public hearings on the overall PM<sub>10</sub> control plans, probably in early 1990.

Approved:

Section:

Division:

Director:

John F. Henderson  
W. Housholder  
Bill Hough

Report Prepared By: Merlyn L. Hough

Phone: 229-6446

Date Prepared: August 23, 1989

MLH:r  
PLAN\AR939 (8/23/89)

## Recommended Rule Modifications

## OAR 340-30-050

(1) The Department will require the installation and operation of instrumentation for measuring and recording emissions and/or the parameters which affect the emission of air contaminants from wood-waste boilers, veneer dryers, fiber dryers, and particle dryers to ensure that the sources and the air pollution control equipment are operated at all times at their full efficiency and effectiveness so that the emission of air contaminants is kept at the lowest practicable level. The instrumentation shall be periodically calibrated. The method and frequency of calibration shall be approved in writing by the Department. Continuous monitoring equipment and operation shall be in accordance with continuous emission monitoring systems guidance provided by the Department and shall be consistent, where applicable, with the EPA performance specifications and quality assurance procedures outlined in 40 CFR 60, Appendices B and F, and the Quality Assurance Handbook for Air Pollution Measurement Systems, Volume III. The recorded information shall be kept for a period of at least one year and shall be made available to the Department upon request. The selection, installation, and use of the instrumentation shall be done according to the following schedule:

(a) Within six months from the effective date of these rules, the persons responsible for the affected facilities shall submit to the Department a plan for process and/or emission monitoring. The Department's primary criterion for review and approval of the plans will be the ability of proposed instrumentation to demonstrate continuous compliance with these regulations.

(b) Within one year from the Department's approval of the plan(s), the persons responsible for the affected facilities shall purchase, install, place in operation the instrumentation as approved, verify that it is capable of demonstrating continuously the compliance status of the affected facilities, and commence continuous monitoring and reporting results to the Department, at a frequency and in a form agreed upon by the Department and the responsible persons.

(c) The implementation date in paragraph (1)(b) of this section can be extended up to one year, subject to Department approval, if justified by the persons responsible for the affected facilities based on unavailability of suitable equipment or other problems.

(2) At a minimum, the monitoring plan submitted under paragraph (1)(a) of this section shall include:

(a) Continuous monitoring and monthly reporting of carbon monoxide concentration[, ] and oxygen concentration[, ] for any wood-waste boiler with a heat input greater than 35 million BTU/hr or for any wood-waste fired boiler using a wet scrubber as pollution control equipment and steam production rate for any wood-waste fired boiler;

(b) Continuous monitoring and monthly reporting of pressure drop, scrubber water pressure, and scrubber water flow for any wood-waste fired boiler, veneer dryer, particle dryer, or fiber dryer using a wet scrubber as pollution control equipment;

(c) Continuous monitoring and monthly reporting of opacity for any wood-waste fired boiler not controlled by a wet scrubber; and

(d) Continuous availability by electronic means to the Department of the emission and performance data specified in paragraphs (2)(a) through (c) of this section for any wood-waste fired boiler subject to the emission requirements of OAR 340-30-015.

#### 340-30-055

(1) The person responsible for the following sources of particulate emissions shall make or have made test to determine the type, quantity, and duration of emissions, and/or process parameters affecting emissions, in conformance with test methods on file with the Department at the following frequencies:

(a) Wood Waste Boilers with heat input greater than 35 million Btu/hr. -- Once every year;

(b) Veneer Dryers -- Once every year during 1991, 1992, and 1993 and once every 3 years thereafter.

(c) Wood Particle Dryers at Hardboard and Particleboard Plants -- Once every year;

(d) Charcoal Producing Plants -- Once every year[.];

(e) Wood Waste Boilers with heat input equal to or less than 35 million Btu/hr with dry emission control equipment -- Once in 1991 and once every 3 years thereafter.

(2) Source testing shall begin at these frequencies within 90 days of the date by which compliance is to be achieved for each individual emission source.

(3) These source testing requirements shall remain in effect unless waived in writing by the Department because of adequate demonstration that the source is consistently operating at lowest practicable levels, or that continuous emission monitoring systems are producing equivalent information.

(4) Source tests on wood waste boilers shall not be performed during periods of soot blowing, grate cleaning, or other abnormal operating conditions. The steam production rate during the source test shall be considered the maximum permittee's steaming rate for the boiler.

(5) Source tests shall be performed within 90 days of the startup of air pollution control systems.

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PO\AH123\AH12532  
(4/9/91)

RULEMAKING STATEMENTS FOR  
PROPOSED MODIFICATIONS TO INDUSTRIAL RULES  
FOR THE MEDFORD-ASHLAND AIR QUALITY MAINTENANCE AREA  
AND THE GRANTS PASS URBAN GROWTH AREA

STATEMENT OF NEED FOR RULEMAKING

Pursuant to ORS 183.335(7), this statement provides information on the intended action to amend a rule.

(1) Legal Authority

This proposal amends Oregon Administrative Rules (OAR) 340, Division 30. It is proposed under authority of Oregon Revised Statutes (ORS) Chapter 468, including ORS 468.015, 468.020, 468.280, 468.285, 468.295, 468.305.

(2) Need for these Rule Modifications

The Department believes the added financial burden of purchase, installation, and operation of Carbon Monoxide (CO) and Oxygen (O<sub>2</sub>) Continuous Emission Monitoring (CEM) equipment on the small boiler operator is not warranted by the value of the information gathered or improvements in boiler control resulting from availability of the data.

(3) Principal Documents Relied Upon

OAR 340, Division 30, Specific Air Pollution Control Rules for the Medford-Ashland Air Quality Maintenance Area and the Grants Pass Urban Growth Area.

Letter from Double Dee Lumber Company dated November 30, 1990.

Letter from Double Dee Lumber Company dated February 8, 1991.

All documents referenced may be inspected at the Department of Environment Quality, 811 SW 6th Ave., Portland, OR, during normal business hours.

LAND USE CONSISTENCY STATEMENT

The proposed rule changes appear to affect land use as defined in the Department's coordination program with DLCD, but appear to be consistent with the Statewide Planning Goals.

With regard to Goal 6, (air, water, and land resources quality), the proposed changes are designed to enhance and preserve air quality in the State and are considered consistent with the goal. The proposed rule changes do not appear to conflict with the other Goals.

Public comment on any land use issue involved is welcome and may be submitted in the same fashion as indicated for other testimony on these rules.

It is requested that local, state, and federal agencies review the proposed action and comment on possible conflicts with their programs affecting land use and with Statewide Planning Goals within their expertise and jurisdiction.

The Department of Environmental Quality intends to ask the Department of Land Conservation and Development to mediate any appropriate conflicts brought to our attention by local, state, or federal authorities.

JJR:a  
PO\AH123\AH12533  
(4/9/91)

**FISCAL AND ECONOMIC IMPACT STATEMENT  
FOR PROPOSED MODIFICATIONS TO INDUSTRIAL RULES  
FOR THE MEDFORD-ASHLAND AIR QUALITY MAINTENANCE AREA  
AND THE GRANTS PASS URBAN GROWTH AREA**

**PROPOSAL SUMMARY**

The proposed rule modification would:

- o Exclude small boiler operators (equal to or less than 35 million BTU/hr) with dry exhaust stacks from Carbon Monoxide (CO) and Oxygen (O<sub>2</sub>) monitoring requirements contained in Oregon Administrative Rules (OAR) 340, Division 30.
- o Require small boiler operators meeting the exclusion to source test their wood-waste boilers every three years.

**COSTS TO SMALL BOILER OPERATORS**

Based on estimates supplied by Continuous Emission Monitoring (CEM) equipment vendors, the cost breakdown for a CEM system, as required by the existing rule, for a single wood-fired boiler with a dry exhaust stack is as follows:

CO & O <sub>2</sub> monitoring -	≈ \$50,000 - \$100,000
Opacity monitoring -	≈ \$20,000 - \$ 30,000
Data Acquisition System -	≈ \$15,000 - \$ 20,000

The total cost estimate of \$85,000 to \$150,000 includes equipment purchase, installation, specification testing, certification, and other related expenses. The cost of on-going maintenance and operation is not included in these figures. The range of values primarily reflects choice of vendor and sophistication of equipment. Sources such as Double Dee Lumber and Croman Corporation with two boilers will be near the upper end of this range. Through selection of less sophisticated monitoring equipment, sources may be able to reduce their initial costs but most likely increase their maintenance costs in the long term.

The proposed rule modification would result in CEM costs for an average boiler installation of approximately \$35,000 to \$50,000 and periodic source test costs of approximately \$4,000 to \$5,000. This may be compared to the CEM costs of the large boiler systems of approximately \$85,000 to \$150,000.

The proposed rule modification would save approximately the small boiler operator \$50,000 to \$100,000 depending on the vendor source, sophistication of monitoring equipment, and boiler configuration.

The proposed rule modifications would add the cost of source testing of each wood-fired boiler every three years at an approximate cost of \$4,000 to \$5,000 per boiler per test. The cost of source testing two boilers is estimated at \$7,000 to \$8,000 dollars.

COSTS TO THE DEPARTMENT OF ENVIRONMENTAL QUALITY

Costs to the Department would consist of review and oversight of the added source tests and would be offset by the cost savings of not reviewing CO and O<sub>2</sub> monthly monitoring reports from the affected sources.

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(4/9/91)

REQUEST FOR EQC ACTION

Meeting Date: April 26, 1990  
Agenda Item: H  
Division: Air Quality  
Section: Planning & Development

**SUBJECT:**

Proposed adoption of Amendments to Industrial Volatile Organic Compound (VOC) Rules.

**PURPOSE:**

To align the Department's VOC Rules with current federal requirements, as part of the revision to the State Implementation Plan (SIP) for attainment of the ambient air standard for ozone.

**ACTION REQUESTED:**

- Work Session Discussion
  - General Program Background
  - Potential Strategy, Policy, or Rules
  - Agenda Item  for Current Meeting
  - Other: (specify)

Authorize Rulemaking Hearing

Adopt Rules

- Proposed Rules
- Rulemaking Statements
- Fiscal and Economic Impact Statement
- Public Notice

Attachment A  
Attachment B  
Attachment B  
Attachment C

Issue a Contested Case Order

Approve a Stipulated Order

Enter an Order

Proposed Order

Attachment     



811 SW Sixth Avenue  
Portland, OR 97204-1390  
(503) 229-5696



Meeting Date: April 26, 1991  
Agenda Item: H  
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<input type="checkbox"/> Approve Department Recommendation	
<input type="checkbox"/> Variance Request	Attachment <input type="checkbox"/>
<input type="checkbox"/> Exception to Rule	Attachment <input type="checkbox"/>
<input type="checkbox"/> Informational Report	Attachment <input type="checkbox"/>
<input type="checkbox"/> Other: (specify)	Attachment <input type="checkbox"/>

DESCRIPTION OF REQUESTED ACTION:

The Department of Environmental Quality (DEQ, Department) has proposed amendments to its Industrial VOC Rules which will assure national consistency as required by EPA in its policy for areas that continue to exceed the federal ozone standard.

The Department's VOC Rules apply to new and existing sources inside the Portland-Vancouver, Medford-Ashland, and Salem areas. The highlights of the proposed rule amendments are as follows: 1) lower the exemption point for small surface coating sources from 40 to 10 tons per year (tpy); 2) require daily recordkeeping of VOC content for small surface coating sources; 3) lower the VOC emission limit for high performance architectural coating sources; 4) in certain cases allow an affected source to obtain rule exception upon Department and EPA approval of a source specific SIP revision; 5) establish a new rule related to aerospace component coatings; 6) require Reasonably Available Control Technology (RACT) for major sources not covered by specific federal RACT guidelines; and 7) add and revise rule definitions consistent with federal definitions.

At this time the Department is requesting adoption of the Industrial VOC Rule amendments, as modified after consideration of public hearing comments and discussions with EPA.

AUTHORITY/NEED FOR ACTION:

<input type="checkbox"/> Required by Statute: _____	Attachment <input type="checkbox"/>
Enactment Date: _____	
<input type="checkbox"/> Statutory Authority: OAR 468.280	Attachment <input type="checkbox"/>
<input type="checkbox"/> Pursuant to Rule: _____	Attachment <input type="checkbox"/>
<input type="checkbox"/> Pursuant to Federal Law/Rule: _____	Attachment <input type="checkbox"/>
<input type="checkbox"/> Other:	Attachment <input type="checkbox"/>
<input type="checkbox"/> Time Constraints: (explain)	

DEVELOPMENTAL BACKGROUND:

___ Advisory Committee Report/Recommendation	Attachment ___
___ Hearing Officer's Report/Recommendations	Attachment <u>D</u>
___ Response to Testimony/Comments	Attachment ___
___ Prior EQC Agenda Items: (list)	Attachment ___
___ Other Related Reports/Rules/Statutes:	Attachment ___
___ Supplemental Background Information	Attachment ___

Volatile organic compounds are principally associated with gasoline marketing, motor vehicle emissions, and solvents in paints. These compounds react under high temperatures, sunlight, and with other pollutants to form ozone, a highly reactive and respiratory irritating gas.

In 1979 and 1980 the Environmental Quality Commission (EQC, Commission) adopted rules for control of Volatile Organic Compounds (VOC), as part of Oregon's State Implementation Plan to assure that the federal ozone standard is achieved and maintained. These VOC rules were applicable to the state's three ozone non-attainment areas<sup>1</sup> - Medford, Salem, and Portland, and contained emission standards based on "reasonably available" technology, and consistent with federal Control Technology Guideline (CTG) documents.

On January 31, 1986, the EQC adopted amendments to the VOC Rules which incorporated exemptions for small industrial painting sources (miscellaneous metal coating) which had not been successful in finding acceptable, lower VOC coatings to comply with the federal emission limits.

Many states, including Oregon, did not meet EPA's ozone attainment demonstration requirements by the December 31, 1987 Clean Air Act deadline. As a result, in 1988 EPA initiated a "SIP call", informing these states that revisions to their industrial VOC rules were necessary, in order to be consistent nationally. The Department agreed that revisions to its ozone control strategies were needed.

To assist states in revising their industrial VOC rules, EPA began a national VOC Rule Effectiveness Study in 1988. Part of this study involved a determination as to whether each state's VOC regulations were consistent with federal CTG's.

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<sup>1</sup> Portland is currently the only ozone non-attainment area - Salem and Medford are in attainment but must still comply with the VOC rules in order to maintain attainment with the ozone standard.

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This study concluded that Oregon's VOC rules contained some definitions, exemptions, and other requirements inconsistent with federal CTG's and EPA policy<sup>2</sup>. As a result, EPA recommended the following changes to the VOC rules to make them nationally consistent: (1) revising and adding definitions; (2) identifying averaging times associated with emission limits; and (3) eliminating certain exemptions.

The Department began revising its VOC rules in early 1990 in accordance with the schedule contained in the FY'91 State/EPA Agreement, targeting October 1, 1990 as the completion date for these revisions. The Environmental Quality Commission authorized these proposed rule amendments for public hearing at its June 29, 1990 meeting. Hearings took place on July 31 and August 16 in Portland. The testimony from the hearings has been summarized in Attachment B.

Testimony by industry at the public hearings contained objections to several federal requirements. The basis of these objections related to whether the federal requirements were feasible and appropriately represented RACT criteria. In November 1990 the Department sent to the EPA regional office in Seattle its recommendations for alternative requirements. After reviewing these recommendations, EPA requested the Department delay rule adoption in order to allow its Headquarters sufficient time to review the alternatives proposed by the Department. In late February 1991 the regional office received final comments from headquarters, and forwarded these comments to the Department on March 1.

**REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:**

An important element related to the adoption of these VOC rule amendments is a provision in the new Clean Air Act of 1990, setting a deadline of May 15, 1991 for states to revise their VOC rules. In order to meet this deadline the Department's VOC rule amendments would need to be adopted by the Commission at the April 26, 1991 meeting. Failure by the Department to meet this deadline would subject sources to a federal industrial VOC rule, thereby losing state delegation of authority to implement these federal regulations. With respect to the objections raised by industry at the public hearings, the Department believes it has satisfactorily resolved these issues with EPA consistent with RACT requirements and in a manner that will ensure continued state delegation of authority for VOC sources.

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<sup>2</sup> Most of the rule changes identified by EPA were the result of the rule exemptions for small surface coating sources adopted on January 31, 1986, as described above.

The amendments made to the Department's industrial VOC rules will affect primarily two industrial categories - surface coating operations with annual emissions between 10 and 40 tons per year (tpy), and sources which emit over 100 tpy of VOC for which no federal CTGs currently apply. The number of sources affected is approximately 25 surface coating operations and 5 sources with non-CTG VOC emissions.

Industry response to proposed rule amendments are summarized in the Hearings Officer's Report (Attachment B).

The following outlines the major issues raised by industry:

- o Small surface coating sources with the potential to emit over 10 tpy will now be subject to RACT requirements. The previous exemption level was 40 tpy, so this will subject about 25 surface coating sources to RACT requirements. In most cases this will require sources to use compliance paints (low-solvent or higher solids paints), or to install afterburners for vapor destruction. Some affected sources stated that using compliance paints would be expensive, and in some cases impractical (see below), and the costs of purchasing and installing afterburners would be prohibitive.
- o Surface coating operations which apply high performance architectural coatings will have to change to a lower VOC content coating (3.5 lb/gal.) as required by the federal CTG for miscellaneous metal coatings. Two surface coating operations affected by this rule indicated that due to the extreme weather conditions aluminum panels on high-rise buildings encounter, these coatings must meet a manufacturer's specification of 6.2 lb/gal to be commercially acceptable. Several states including California and New York have rules allowing the 6.2 emission limit for this particular coating. Another surface coating source which applies a metalization coating on plastic indicated that a compliance paint is currently not available, and also requested an exception to the 3.5 RACT emission limit.
- o One surface coating source which coats aerospace components indicated that compliance paints presently available do not meet the extreme performance requirements related to airplane safety, and that other states have adopted rules allowing higher emission limits. This source requested that the Department either wait until a federal CTG for aerospace is developed, adopt a state aerospace rule, or grant a special exemption to this source.

- o All surface coating sources will be required to keep daily records. Some sources claimed this would be very difficult and in some cases impossible in situations where as many as 40-50 different applications and color changes are made daily.
- o Sources which have the potential to emit VOCs over 100 tpy for which no federal CTGs exist will have RACT determined by DEQ. One source affected by this requirement stated that the proposed rule language was unclear as to how the Department would determine RACT if no federal guidelines exists, and if the 100 tpy level was based on total plant emissions or the individual emission unit producing 100 tpy of VOC. It was also pointed out that since no federal CTGs exist, there are no indicators as to what costs would be associated with this level of control.
- o One source which operates a bulk gasoline plant indicated that his plant should be exempt from vapor recovery requirements since his delivery trucks deliver to service stations which are exempt from vapor recovery.

Current state rules for surface coating operations which were found to be inconsistent with federal CTG's were not approved as part of the SIP. The proposed rule amendments will change these rules back to match federal CTG emission limits and the limits specified in the previously approved SIP rules. As a result, affected surface coating sources will be required to comply immediately with the new state rules.<sup>3</sup> These sources will have the option of applying for a "source specific SIP revision" - a case-by-case exception approved by the Department and EPA. Sources seeking this exemption must successfully demonstrate that the CTG emission limit does not represent "reasonably available control technology" due to technical and economic infeasibility, and indicate an alternative emission limit. Other options these sources would have would include negotiating an appropriate compliance schedule or other equivalent emission control measures approvable by the Department and EPA.

For 100 tpy sources for which no CTG applies, the Department will require that a complete RACT analysis be submitted in three months which describes reasonable available control technology for these VOC emissions, and that this plan be approved by the Department and EPA as a source

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<sup>3</sup> These sources have always been subject to compliance with the federally approved SIP, and this action will make the state rules consistent.

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specific SIP revision. Compliance will be required within one year of approval of RACT requirements for each source.

Two of the proposed amendments - applying RACT to major sources not subject to federal CTGs, and applying the 3.5 lb/gal VOC limit to can end-sealing operations - will address part of the issues raised in a law suit filed by the Sierra Club against the Department for allegedly failing to enforce the state ozone SIP. Other issues related to this law suit are outside the scope of these rules, and are being addressed by the Attorney General's Office.

#### PROGRAM CONSIDERATIONS:

EPA has identified that national consistency in state industrial VOC rules as an important goal in achieving nationwide attainment and maintenance of the ozone air quality standard. The Department recognizes that the proposed rule amendments will affect mostly small surface coating operations and a few large sources for which no federal CTGs currently exist, by subjecting them to RACT requirements. Given the alternative of delegating authority to EPA for administering and enforcing these federal requirements, the Department believes this authority should remain at the state level.

The Department expects an increase in workload as a result of these proposed rule amendments. This workload increase will include, 1. Setting compliance schedules and making permit modifications for surface coating sources now required to apply RACT; 2. Determining RACT permit conditions for about five 100 ton non-CTG sources; and 3. Processing an estimated 5-10 source-specific SIP revisions.

The Department believes it can accommodate this additional workload in part through additional resources becoming available from the new federal emissions fee permit program contained in the New Clean Air Act of 1990.

#### ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

1. Exempt small surface coating sources under 40 tpy which demonstrate that the cost of using low-solvent paints or afterburners exceeds the "reasonable" economic criteria for RACT.
2. Allow small surface coating sources to continue recording paint usage on an annual or monthly basis, rather than daily.

3. Exempt high performance architectural coating sources from the 3.5 lb/gal limit in cases where the manufacturers specification requires the 6.2 lb/gal coating be used.
4. Exempt aerospace component coating sources from the 3.5 lb/gal limit, given the extreme performance and safety requirements associated with aerospace parts.
5. Exempt sources which emit over 100 tpy of VOC for which no federal CTG exists from having to apply RACT.
6. Exempt bulk gasoline plants from the vapor balance requirement in cases where the plant's delivery trucks deliver to service stations already exempted from this requirement.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

1. The Department does not support alternative 1. EPA now requires most states to uniformly apply an exemption point of 10 tpy, due to the availability in most cases of compliance paints. EPA believes the costs associated with using compliance paints are "reasonable", and that the use of add-on equipment such as afterburners to control VOC emissions can in some cases be economically justifiable. In some cases EPA does recognize that compliance paints are not available and control equipment costs would be unreasonable. In these situations EPA allows the state to exempt a source through a source-specific SIP revision. The state implementation plan must then be amended to show the alternative RACT emission limit for this source.

Initially, the Department indicated it did not favor the source-specific SIP revision approach in general because it represents a variance from established regulations, and does not lay out in rule form to sources what is acceptable control. Rather, the Department favors a rule change indicating the alternative RACT emission limit by source category (e.g., 6.2 lbs per gal for architectural coatings). EPA responded that the Department could incorporate source-specific SIP revisions directly into the rules, listing each individual source exemption by name in the rules (i.e., 6.2 lbs per gal for Smith Coatings, Inc.). Recognizing that there was insufficient time for sources to submit their documentation of RACT and receive DEQ and EPA approval prior to the April 26 meeting, the Department decided to forgo the incorporation of source specific SIP revisions into the rules. Instead, the rules provide for sources that find compliance unreasonable to

apply for a source specific SIP revision to gain relief from the more stringent requirement.

2. The Department does not support alternative 2. EPA requires that records must be kept in a manner consistent with compliance time frames. Since the federal and state health standard for ozone is 0.12ppm over a one hour averaging period, the compliance time frame should be some form of daily record keeping. The Department recognizes that while daily tracking the amount of paint used may be infeasible for some sources which apply small amounts of paints many times during the day, tracking of the VOC content of the paints used daily is a feasible alternative which would allow daily compliance determination. While this may still be an inconvenience for low usage sources which in the past determined emissions from either annual or monthly use of paint, the Department has received EPA assurance that this approach will satisfy federal daily compliance requirements.
3. The Department recommends alternative 3 as a source-specific SIP revision. This procedure, outlined above in paragraph one, would require these sources or any similar source to prove that technical and economic factors prevent them from using compliance paints or installing afterburners for vapor destruction.

Initially, the Department had recommended to EPA that the 6.2 lb/gal emission limit for high performance architectural coatings should be considered RACT, since this particular coating must meet the manufacturer's performance specification, and since other state regulatory agencies in California and New York have adopted identical rules. EPA Headquarters disapproved of this approach, stating that the rules adopted in other states have not been approved by EPA, and that the appropriate mechanism for this exemption is through a source-specific SIP revision.

4. The Department supports alternative 4. In discussions with EPA, an agreement was reached that a separate aerospace rule could be developed. This was based on the fact that the recently adopted 1990 Clean Air Act contains a provision for EPA to develop a CTG for the aerospace industry. This CTG is expected to be issued in about three years. EPA's approval of this approach is contingent upon the Department providing adequate technical justification for those coating limits which differ from the 3.5 lb/gal limit. This technical justification must be submitted to EPA with the adopted rules as part of the SIP revision. It is possible that



EPA may still disapprove this rule and require additional technical justification. It is also possible that if approved, Department may have to revise the rule at a later date to conform to the aerospace CTG when it is issued by EPA. In proposing the specific rule the Department believes this offers the opportunity for the most reasonable level of control to be applied.

5. The Department does not support alternative 5. Appendix D of the November 24, 1987 Federal Register specifies that states must require RACT "for sources with the potential to emit more than 100 tons per year, but that do not fall into a CTG category". States must then submit to EPA for approval this RACT determination as a SIP revision.

Based on some confusion over the applicability of this requirement and the procedure for determining RACT for these sources, the Department added some clarification language to this rule provision:

- o Affected sources are those which have potential emissions "before add-on equipment" of over 100 tons per year of VOC "from aggregated emission units".
  - o RACT shall be developed on a "case by case basis", and "incorporated in the source's Air Contaminant Discharge Permit and submitted to EPA as a source-specific SIP revision".
  - o Sources subject to this requirement whose emissions fall below 100 tpy may only be exempted from this requirement if they can "demonstrate to the Department that the emission reduction is permanent".
6. The Department agrees with alternative 6, and has made this revision exempting bulk gasoline plants from vapor recovery where the plant's delivery trucks deliver to exempt service stations, providing the delivery trucks are used "exclusively" for this purpose.

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CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

The proposed rule amendments are in accordance with the 1977 Clean Air Act Amendments, which directs each state where there is a designated non-attainment area to prepare a revised State Implementation Plan which assures timely attainment and maintenance of the applicable federal air quality standard.

The proposed rule amendments are also in accordance with the 1990 Clean Air Act Amendments, which establishes a deadline for states to complete revisions to VOC rules by May 15, 1991.

ISSUES FOR COMMISSION TO RESOLVE:

1. Should the Department defer authority to regulate VOC emissions from sources which do not believe they can comply with federal control requirements, or should the Department as proposed adopt these federal requirements and offer sources an opportunity to apply for exceptions through application for a source specific SIP revision ?

INTENDED FOLLOWUP ACTIONS:

1. File adopted rules with the Secretary of State.
2. Submit the adopted rules to EPA by May 15, 1991, as a revision to the State Implementation Plan.
3. Set compliance schedules and revise permits for affected sources.
4. Process source specific SIP revisions.

Approved:

Section: John Kawalajt

Division: John Greenwood

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BRF:a  
PLAN\AH12\AH12530 (4/9/91)

## General Emission Standards for Volatile Organic Compounds

### Introduction

340-22-100 (1) These rules regulate sources of VOC which contribute to the formation of photochemical oxidant, mainly ozone.

(2) Since ozone standards are not violated in Oregon from October through April (because of insufficient solar energy), natural gas-fired afterburners may be permitted, on a case-by-case basis, to lay idle during the winter months.

(3) Sources regulated by these rules are:

(a) New sources and all existing sources in the Portland and Medford AQMA's and in the Salem SATS for subsections (b) through (m) of this section;

(b) Gasoline stations, underground tank filling;

(c) Bulk gasoline plants and delivery vessels;

(d) Bulk gasoline terminal loading;

(e) Cutback asphalt;

(f) Petroleum refineries, petroleum refinery leaks;

(g) VOC liquid storage, secondary seals;

(h) Coating including paper coating and miscellaneous painting;

(i) Degreasers;

(j) Asphaltic and coal tar pitch in roofing;

(k) Flat wood coating;

(l) Rotogravure and Flexographic printing;

(m) Perchloroethylene dry cleaning.

(4) Sources not covered by the source categories listed in section (3) above which emit or have the potential to emit over 100 tons of VOC per year are subject to OAR 340-22-104 (5).

Stat. Auth.:ORS ch. 468

Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86

### Definitions

340-22-102 As used in these regulations, unless otherwise required by context:

(1) "Aerospace component" means the fabricated part, assembly of parts, or completed unit of any aircraft, helicopter, missile or space vehicle.

(2) [{"+}]"Air dried coating" means coatings which are dried by the use of air at ambient temperature.

(3) "Applicator" means a device used in a coating line to apply coating.

(4) f(2) "Bulk gasoline plant" means a gasoline storage and distribution facility which receives gasoline from bulk terminals by railroad car or trailer transport, stores it in tanks, and subsequently dispenses it via account trucks to local farms, businesses, and service stations.

(5) f(3) "Bulk gasoline terminal" means a gasoline storage facility which receives gasoline from refineries primarily by pipeline, ship, or barge, and delivers gasoline to bulk gasoline plants or to commercial or retail accounts primarily by tank truck.

(6) f(4) "Can Coating" means any coating applied by spray, roller, or other means to the inside and/or outside surfaces of metal cans, drums, pails, or lids.

(7) f(5) "Carbon Bed Breakthrough" means the initial indication of depleted adsorption capacity characterized by a sudden measurable increase in VOC concentration exiting a carbon adsorption bed or column.

(8) f(6) "Certified Underground Storage Device" means vapor recovery equipment for underground storage tanks as certified by the State of California Air Resources Board Executive Orders, copies of which are on file with the Department, or ~~equivalent approval~~ which has been certified by other air pollution control agencies and approved by the Department.

(9) f(7) "Class II hardboard paneling finish" means finishers which meet the specifications of Voluntary Product Standard PS-59-73 as approved by the American National Standards Institute.

(10) f(8) "Clear coat" means a coating which lacks color and opacity or is transparent and uses the undercoat as a reflectant base or undertone color.

(11) "Coating" means a material applied to a surface which forms a continuous film and is used for protective and/or decorative purposes.

(12) f(9) "Coating Line" means one or more apparatus or operations which include a coating applicator, flash-off area, and oven or drying station wherein a surface coating is applied, dried, and/or cured.

(13) "Condensate" means hydrocarbon liquid separated from natural gas which condenses due to changes in the temperature and/or pressure and remains liquid at standard conditions.

(14) "Crude oil" means a naturally occurring mixture which consists of hydrocarbons and/or sulfur, nitrogen, and/or oxygen derivatives of hydrocarbons and which is a liquid at standard conditions.

(15) "Custody transfer" means the transfer of produced petroleum and/or condensate after processing and/or treating in the producing operations, from storage tanks or automatic transfer facilities to pipelines or any other forms of transportation.

(16) f(10) "Cutback asphalt" means a mixture of a base asphalt with a solvent such as gasoline, naphtha, or kerosene. Cutback asphalts are rapid, medium, or slow curing (known as RC, MC, SC), as defined in ASTM D2399.

(17) ~~{(11)}~~"Day" means a 24-hour period beginning at midnight.

(18) ~~{(12)}~~"Delivery vessel" means any tank truck or trailer used for the transport of gasoline from sources of supply to stationary storage tanks.

(19) ~~{(13)}~~"Dry cleaning facility" means any facility engaged in the cleaning of fabrics in an essentially nonaqueous solvent by means of one or more washes in solvent, extraction of excess solvent by spinning, and drying by tumbling in an airstream. The facility includes but is not limited to any washer, dryer, filter and purification systems, waste disposal systems, holding tanks, pumps, and attendant piping and valves.

(20) "Emission Unit" means any part of a stationary source which emits or would have the potential to emit any pollutant subject to regulation.

(21) "External floating roof" means a cover over an open top storage tank consisting of a double deck or pontoon single deck which rests upon and is supported by the volatile organic liquid being contained, and is equipped with a closure seal or seals to close the space between the roof edge and tank shell.

(22) ~~{(14)}~~"Extreme performance coatings" means coatings designed for extreme environmental conditions such as exposure to any one of the following: continuous ambient weather conditions ~~{the weather all of the time}~~, temperature consistently above 95°C., detergents, abrasive and scouring agents, solvents, corrosive atmosphere, or similar environmental conditions.

(23) "Extreme performance interior topcoat" means a topcoat used in interior spaces of aircraft areas requiring a fluid, stain or nicotine barrier.

(24) "Fabric coating" means any coating applied on textile fabric. Fabric coating includes the application of coatings by impregnation.

(25) ~~{(15)}~~"Flexographic Printing" means the application of words, designs and pictures to a substrate by means of a roll printing technique in which the pattern to be applied is raised above the printing roll and the image carrier is made of rubber or other elastomeric materials.

(26) ~~{(16)}~~"Freeboard ratio" means the freeboard height divided by the width (not length) of the degreaser's air/solvent area.

(27) ~~{(17)}~~"Forced air dried coating" means a coating which is dried by the use of warm air at temperatures up to 90°C (194°F).

(28) ~~{(18)}~~"Gasoline" means any petroleum distillate having a Reid vapor pressure of 27.6 kPa (4.0 psi) or greater which is used to fuel internal combustion engines.

(29) ~~{(19)}~~"Gasoline dispensing facility" means any site where gasoline is dispensed to motor vehicle, boat, or airplane gasoline tanks from stationary storage tanks.

(30) ~~{(20)}~~"Gas service" means equipment which processes, transfers or contains a volatile organic compound or mixture of volatile organic compounds in the gaseous phase.

(31) ~~{(21)}~~ "Hardboard" is a panel manufactured primarily from inter-felted ligno-cellulosic fibers which are consolidated under heat and pressure in a hot press.

(32) ~~{(22)}~~ "Hardwood plywood" is plywood whose surface layer is a veneer of hardwood.

(33) ~~{(23)}~~ "High Performance Architectural Coating" means coatings applied to aluminum panels and moldings being coated away from the place of installation.

(34) ~~{(23)}~~ "Internal floating roof" means a cover or roof in a fixed roof tank which rests upon or is floating upon the petroleum liquid being contained, and is equipped with a closure seal or seals to close the space between the roof edge and tank shell.

~~{(24)}--"LAER" means the rate of emissions which reflects:~~

~~(a) The most stringent emission limitation which is contained in the implementation plan of any State for such class or category of source, unless the owner or operator of the proposed source demonstrates that such limitations are not achievable, or not maintainable for the proposed source;--or~~

~~(b) The most stringent emission limitations which is achieved and maintained in practice by such class or category of source, whichever is more stringent.--In no event shall the application of LAER allow a proposed new or modified source to emit any pollutant in excess of the amount allowable under applicable new source standards of performance (OAR 340-25-535).--}~~

(35) "Large appliance" means any residential and commercial washers, dryers, ranges, refrigerators, freezers, water heaters, dish washers, trash compactors, air conditioners, and other similar products.

(36) ~~{(25)}~~ "Leaking component" means any petroleum refinery source which has a volatile organic compound concentration exceeding 10,000 parts per million (ppm) when tested in the manner described in method 31 and 33 on file with the Department. These sources include, but are not limited to, pumping seals, compressor seals, seal oil degassing vents, pipeline valves, flanges and other connections, pressure relief devices, process drains, and open-ended pipes. Excluded from these sources are valves which are not externally regulated.

(37) "Liquid-mounted" means a primary seal mounted so the bottom of the seal covers the liquid surface between the tank shell and the floating roof.

(38) ~~{(26)}~~ "Liquid service" means equipment which processes, transfers or contains a volatile organic compound or mixture of volatile organic compounds in the liquid phase.

(39) "Low solvent coating" means a coating which contains a lower amount of volatile organic compound than conventional organic solvent borne coatings. Low solvent coatings include waterborne, higher solids, electrodeposition and powder coatings.

(40) "Major modification" means any physical change or change of operation of a source that would result in a net significant emission rate increase for any pollutant subject to regulation under the Clean Air Act. Refer to OAR 340-20-225 (14).

(41) "Major source" means a stationary source which emits or has the potential to emit any pollutant regulated under the Clean Air Act at a significant emission rate. Refer to OAR 340-20-225 (15).

(42) "Maskant for chemical processing" means a coating applied directly to an aerospace component to protect surface areas when chemical milling, anodizing, aging, bonding, plating, etching and/or performing other chemical operations on the surface of the component.

(43) "Miscellaneous metal parts and products" means any metal part or metal product, even if attached to or combined with a nonmetal part or product, except cans, coils, metal furniture, large appliances, magnet wires, automobiles, ships, and airplane bodies.

~~{(27)--"Modified"--means any change in the method of operation of, or addition to, or physical change of a stationary source which increases the allowable emission rate of any VOC regulated (including any not previously emitted and taking in to account all accumulated increases in allowable emissions occurring at the source since regulations were adopted under this section, or since the time of the last construction approval was issued for the source pursuant to such regulations approved under this section, whichever time is more recent, regardless of any emission reductions achieved elsewhere in the source):~~

~~(a) A physical change shall not include routine maintenance, repair and replacement, unless there is an increase in emission;~~

~~(b) A change in the method of operation, unless previously limited by enforceable permit conditions, shall not include:~~

~~(A) An increase in production rate, if such does not involve a physical change or exceed permit limits;~~

~~(B) An increase in the hours of operation;~~

~~(C) Use of an alternative fuel or raw material by reason of an order in effect under sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation), or by reason of a natural gas curtailment plan in effect pursuant to the Federal Power Act;~~

~~(D) Use of an alternative fuel or raw material, if prior to January 6, 1975, the source was capable of accommodating such fuel or material; or~~

~~(E) Use of an alternative fuel by reason of any order or rule under Section 125 of the Federal Clean Air Act, 1977;~~

~~(F) Change in ownership of the source.}~~

(44) ~~{(28)}~~"Natural finish hardwood plywood panels" means panels whose original grain pattern is enhanced by essentially transparent finishes frequently supplemented by fillers and toners.

(45) ~~{(29)}~~"Operator" means any person who leases, operates, controls, or supervises a facility at which gasoline is dispensed.

(46) "Oven dried" means a coating or ink which is dried, baked, cured, or polymerized at a temperatures over 90°C (194°F).

~~{(30)--"Owner"--means any person who has legal or equitable title to the gasoline storage tanks at a facility.}~~

(47) ~~{+31}~~"Packaging rotogravure printing" means rotogravure printing upon paper, paper board, metal foil, plastic film, and other substrates, which are, in subsequent operations, formed into packaging products and labels for articles to be sold.

(48) "Paper coating" means any coating applied on paper, plastic film, or metallic foil to make certain products, including (but not limited to) adhesive tapes and labels, book covers, post cards, office copier paper, drafting paper, or pressure sensitive tapes. Paper coating includes the application of coatings by impregnation and/or saturation.

(49) ~~{+32}~~"Person" means the federal government, any state, individual, public or private corporation, political subdivision, governmental agency, municipality, industry, co-partnership, association, firm, trust, estate, or any other legal entity whatsoever.

(50) ~~{+33}~~"Petroleum refinery" means any facility engaged in producing gasoline, aromatics, kerosene, distillate fuel oils, residual fuel oils, lubricants, asphalt, or other products through distillation of petroleum, crude oil, or through redistillation, cracking, or reforming of unfinished petroleum derivatives. "Petroleum refinery" does not mean a re-refinery of used motor oils or other waste chemicals. "Petroleum refinery" does not include asphalt blowing or separation of products shipped together.

(51) ~~{+34}~~"Plant site basis" means all of the sources on the premises (contiguous land) covered in one Air Contaminant Discharge Permit unless another definition is specified in a Permit.

(52) "Potential emissions before add-on controls" means the quantity of volatile organic material emissions that theoretically could be emitted by a stationary source, based on the design capacity or maximum production capacity of the source and 8760 hours per year before the application of capture systems or control devices.

(53) "Pretreatment wash primer" means a coating which contains a minimum of 0.5% acid by weight for surface etching and is applied directly to bare metal surfaces to provide corrosion resistance and adhesion.

(54) ~~{+35}~~"Printed interior panels" means panels whose grain or natural surface is obscured by fillers and basecoats upon which a simulated grain or decorative pattern is printed.

(55) ~~{+36}~~"Printing" means the formation of words, designs and pictures, usually by a series of application rolls each with only partial coverage.

(56) "Prime coat" means the first of two or more films of coating applied in an operation.

(57) ~~{+37}~~"Publication rotogravure printing" means rotogravure printing upon paper which is subsequently formed into books, magazines, catalogues, brochures, directories, newspaper supplements, and other types of printed materials.



(58) "Reasonably Available Control Technology" or "RACT" means the lowest emission limitation that a particular source or source category is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility.

(59) ~~{(38)}~~ "Roll printing" means the application of words, designs and pictures to a substrate by means of hard rubber or steel rolls.

(60) "Sealant" means a coating applied for the purpose of filling voids and providing a barrier against penetration of water, fuel or other fluids or vapors.

(61) ~~{(39)}~~ "Specialty Printing" means all gravure and flexographic operations which print a design or image, excluding publication gravure and packaging printing. Specialty Printing includes printing on paper plates and cups, patterned gift wrap, wallpaper, and floor coverings.

~~{(40)}--"Stationary-Source"-means-any-structure,-building,-facility,-or-installation,-which-emits-or-may-emit-any-VOC.-}~~

(62) ~~{(41)}~~ "Splash filling" means the filling of a delivery vessel or stationary storage tanks through a pipe or hose whose discharge opening is above the surface level of the liquid in the tank being filled.

(63) ~~{(42)}~~ "Source" means any ~~{ "Structure, }~~ building, structure, facility, ~~{or }~~ installation~~{ "means-any-grouping-of-pollutant-emitting-activities-which-are }~~ or combination thereof which emits or is capable of emitting air contaminants to the atmosphere and is located on one or more contiguous or adjacent properties and ~~{which-are }~~ is owned or operated by the same person ~~{(or by persons under common control)}~~.

(64) "Source category" means all sources of the same type or classification.

(65) ~~{(43)}~~ "Submerged fill" means any fill pipe or hose, the discharge opening of which is entirely submerged when the liquid is 6 inches above the bottom of the tank; or when applied to a tank which is loaded from the side, shall mean any fill pipe, the discharge of which is entirely submerged when the liquid level is 18 inches, or is twice the diameter of the fill pipe, whichever is greater, above the bottom of the tank.

(66) ~~{(44)}~~ "Thin particleboard" ~~{is }~~ means a manufactured board 1/4 inch or less in thickness made of individual wood particles which have been coated with a binder and formed into flat sheets by pressure.

(67) "Thirty-day rolling average" means any value arithmetically averaged over any consecutive thirty days.

(68) ~~{(45)}~~ "Tileboard" means panelling that has a colored waterproof surface coating.

(69) "Topcoat" means a coating applied over a primer or intermediate coating for purposes such as appearance, identification or protection.

(70) ~~{(46)}~~ "True Vapor Pressure" means the equilibrium pressure exerted by a petroleum liquid as determined in accordance with methods described in American Petroleum Institute Bulletin 2517, "Evaporation loss from Floating Roof Tanks", February 1980.

(71) ~~{(47)}~~ "Vapor balance system" means a combination of pipes or hoses which create a closed system between the vapor spaces of an unloading tank and a receiving tank such that vapors displaced from the receiving tank are transferred to the tank being unloaded.

(72) "Vapor-mounted means a primary seal mounted so there is an annular vapor space underneath the seal. The annular vapor space is bounded by the primary seal, the tank shell, the liquid surface, and the floating roof.

(73) ~~{(48)}~~ "Volatile Organic Compound", ~~{(VOC)}~~ or "VOC", means any organic compound which participates in atmospheric photochemical reactions to form ozone; that is, any precursor organic compound which would be emitted during use, application, curing or drying of a surface coating, solvent, or other material. ~~{of-carbon-that-is-photochemically-reactive-}~~ Excluded from ~~{the}~~ this category ~~{of-Volatile-Organic-Compounds}~~ are ~~{carbon monoxide,-carbon-dioxide,-carbonic-acid,-metallic-carbides-or carbonates,-ammonium-carbonate,-and}~~ those compounds which the U.S. Environmental Protection Agency classifies as being of negligible photochemical reactivity which includes {are} methane, ethane, ~~{methyl-chloroform,-}~~ methylene chloride, 1,1,1-trichloroethane (methyl chloroform), trichlorofluoromethane (CFC-11), dichlorodifluoromethane (CFC-12), chlorodifluoromethane (CFC-22), trifluoromethane (FC-23), trichlorotrifluoroethane (CFC-113), dichlorotetrafluoroethane (CFC-114), and chloropentafluoroethane (CFC-115). ~~{and-trichlorotrifluoroethane-}~~

Stat. Auth.: ORS Ch. 468

Hist.: DEQ 21-1978, f, & ef, 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86

## Limitations and Requirements

### General Requirements for New and Existing Sources

340-22-104 (1) Notwithstanding the emission limitations in these rules, all new major sources or major modifications at existing sources ~~{or-modified-stationary-sources}~~, located within the areas cited in section (2) of this rule, shall comply with OAR 340-20-220 through 340-20-276 (New Source Review) ~~{with-allowable VOC-emission-increases-in-excess-of-90,720-kilograms-(100-tons) per-year,-shall-meet-the-Lowest-Achievable-Emission-Rate-(LAER)-}~~.

(2) All new and existing sources inside the following areas shall comply with the General Emission Standards for Volatile Organic Compounds:

- (a) Portland-Vancouver Air Quality Maintenance Area;
- (b) Medford-Ashland Air Quality Maintenance Area;
- (c) Salem Area Transportation Study (SATS) Area.

(3) VOC sources located outside the areas cited in section (2) of this rule are exempt from the General Emission Standards for Volatile Organic Compounds.

(4) All new and existing sources inside the designated nonattainment areas identified in subsection (2) of this section shall apply Reasonably Available Control Technology (RACT) unless otherwise specifically exempted in these rules. Compliance with the conditions set forth in OAR 340-22-106 through 340-22-300 shall be presumed to satisfy the RACT requirement.

(5) Sources for which no RACT requirements exist and which have potential emissions before add-on equipment of over 100 tons per year (TPY) of VOC from aggregated emission units, shall have RACT requirements developed on a case-by-case basis by the Department. Once a source becomes subject to RACT requirements under these rules, it shall continue to be subject to RACT. If emissions fall below the level that initially triggered RACT, the source may request RACT not be applied, providing the source can demonstrate to the Department that potential emissions are below 100 tons due to a permanent reduction in production or capacity.

(6) Within 3 months of notification by the Department of the applicability of this rule, the source shall submit to the Department a complete analysis of RACT for each category of emission unit at the source, taking into account technical and economic feasibility of available control technology, and the emission reductions each technology would provide. This analysis does not need to include any emission units subject to a specific RACT requirement under these rules. These RACT requirements approved by the Department shall be incorporated in the source's Air Contaminant Discharge Permit, and shall not become effective until approved by EPA as a source specific SIP revision. The source shall have one year from the date of notification by the Department of EPA approval to comply with the applicable RACT requirements.

(7) Failure by a source to submit a RACT analysis required by subsection (6) shall not relieve the source of complying with a RACT determination established by the Department.

Stat. Auth.: ORS Ch. 468

Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86

#### Exemptions

340-22-106 Natural gas-fired afterburners installed for the purpose of complying with these rules shall be operated during the months of May, June, July, August, and September. During other months, the afterburners may be turned off with prior written Departmental approval, provided that the operation of such devices is not required for purposes of occupational health or safety, or for the control of toxic substances, malodors, or other regulated pollutants, or for complying with visual air contaminant limitations.

Stat. Auth.: ORS Ch. 468

Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86

#### Compliance Determination

340-22-107 (1) Certification and test procedures are listed in each specific section and on file with the Department. Applicants are encouraged to submit designs approved by other air pollution control agencies where VOC control equipment has been developed. Construction approvals and proof of compliance will, in most cases, be based on Departmental evaluation of the source and controls.

~~{(2) The person responsible for an existing emission source shall proceed promptly with a program to comply as soon as practicable with these rules. A proposed program and implementation plan including increments of progress shall be submitted to the Department for review.}~~

(2) Approval by the Department of alternative methods for demonstrating compliance where specified and allowed in these rules, including approval of equivalent testing methods for determining compliance, shall be subject to review and approval by EPA.

Stat. Auth.: ORS Ch. 468

Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; Renumbered from 340-22-106 (3) & (4); DEQ 23-1980, f. & ef. 9-26-80; DEQ 12-1981 (Temp), f. & ef. 4-29-81, DEQ 3-1986, f. & ef. 2-12-86;

#### Applicability of Alternative Control Systems

340-22-108 [DEQ 23-1080, f. & ef. 9-26-80; Repealed by DEQ 5-1983, f. & ef. 4-18-83]

#### ~~{Small Gasoline Storage}~~ Gasoline Dispensing Facilities

340-22-110 (1) No person may transfer or cause or allow the transfer of gasoline from any delivery vessel which was filled at a Bulk Gasoline Terminal or nonexempted Bulk Gasoline Plant into any ~~{stationary storage tank}~~ gasoline dispensing facility of less than 40,000 gallon capacity unless:

(a) The tank is filled by submerged fill; and

(b) A vapor ~~{recovery}~~ balance system is used which consists of a Certified Underground Storage Tank Device capable of collecting the vapor from volatile organic liquids and gases so as to prevent their emission to the outdoor atmosphere. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place: or

(c) The vapors are processed by a system demonstrated to the satisfaction of the Department to be of equal effectiveness.

(d) All equipment associated with the vapor ~~recovery~~ balance system shall be maintained to be vapor tight and in good working order. No gasoline delivery shall take place unless the vapor return hose is connected by the delivery truck operator, if required by subsection (1)(b) of this section.

(2) Exemptions~~[-]~~ and Limitations: ~~[This section will not apply to:]~~

(a) In the Portland-Vancouver AQMA, no person shall deliver gasoline to a gasoline dispensing facility unless the gasoline vapor is handled as required in subsection (1)(b) and (c). Gasoline dispensing facilities with a monthly throughput of 10,000 gallons or less of gasoline (thirty-day rolling average) are exempt from these requirements.

(b) In the Medford-Ashland AQMA, all existing storage tanks at gasoline dispensing facilities with a rated capacity of 1,000 gallons or less shall be exempt from the submerged fill requirement in subsection (1)(a);

~~[(a)](c)~~ Transfers made to storage tanks of gasoline dispensing facilities equipped with floating roofs or their equivalent shall be exempt from these rules;

~~[(b)](d)~~ Stationary gasoline storage containers of less than 2,085 liters (550 gallons) used for agricultural purposes shall be exempt from these rules. ~~[However, in the Medford-Ashland AQMA, all existing tanks rated 1,000-gallon capacity, or less, will be exempt from submerged fill.]~~

~~[(c)]~~ Stationary gasoline storage tanks located at a gasoline dispensing facility that are filled by a delivery vessel which was filled at an exempted bulk gasoline plant, provided that the storage tanks use submerged fill. ~~However, in the Portland-Vancouver AQMA, no person shall deliver gasoline to a gasoline dispensing facility at a rate exceeding 10,000 gallons per month from a bulk gasoline plant, unless the gasoline vapor is handled as required by subsection (1)(b) or (c) of this rule.]~~

~~[(d)](e)~~ Stationary gasoline storage tanks with offset fill lines, welded-in drop tubes, or fill pipes of less than 3" diameter, if installed before January 1, 1979, shall be exempt from these rules.

~~[(3)]~~ The owner, operator, or builder of any stationary storage container subject to this rule shall comply by April 1, 1981, except where added equipment is required by rule changes adopted in 1980, compliance is delayed to April 1, 1983.]

~~[(4)](3)~~ Compliance with subsection (1)(b) of this rule shall be determined by verifications of use of equipment identical to equipment most recently approved and listed for such use by the Department or by testing in accordance with Method 30 on file with the Department.

Stat. Auth.: ORS CH. 468

Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 12-1981 (Temp), f. & ef. 4-29-81; DEQ 16-1983, f. & ef. 10-19-83; DEQ 3-1986, f. & ef. 2-12-86

**Bulk Gasoline Plants and Delivery Vessel(s)**

340-22-120 (1) No person shall transfer or allow the transfer of gasoline to or from a bulk gasoline plant unless:

(a) Each stationary storage tank and each delivery vessel uses submerged fill when transferring gasoline; and

(b) The displaced vapors from filling each tank and each delivery vessel are prevented from being released to the atmosphere through use of a vapor tight vapor balance system, or equivalent system as approved in writing by the Department. All equipment associated with the vapor balance system shall be maintained to be vapor tight and in good working order.

~~{Exceptions and limitations are as follows in subsections (1)(c), (d) and (e) of this rule.}~~

~~{(c) If a bulk gasoline plant which is located in the Portland AQMA, transfers less than 4,000 gallons of gasoline per day (annual through put divided by the days worked), or if each of the dispensing facilities to which the plant delivers receives less than 10,000 gallons per month, then capture of displaced vapors during the filling of delivery vessel(s) from the bulk plant is exempt from subsection (1)(b) of this rule and the bulk plant's customers are exempt from rule 340-22-110(1)(b) and (c). If a bulk gasoline plant is located in the Medford Ashland AQMA, or in the Salem SATS, capture of displaced vapors during the filling of delivery vessel(s) from the bulk plant is exempt from subsection (1)(b) of this rule and the bulk plant's customers are exempt from rule 340-22-110(1)(b) and (c), but must still comply with 340-22-110(1)(e).}~~

**(2) Exemptions and Limitations:**

(a) Bulk gasoline plants located within the Portland-Vancouver AQMA which transfer less than 4,000 gallons of gasoline per day (thirty-day rolling average) shall be exempt from the vapor balance requirement in rule 340-22-110 (1)(b).

(b) Bulk gasoline plants which deliver gasoline to dispensing facilities in the Portland-Vancouver AQMA with a monthly throughput of less than 10,000 gallons (thirty-day rolling average) of gasoline are exempt from the vapor balance requirement in rule 340-22-110 (1)(b), providing the gasoline delivery trucks are used exclusively for the delivery of gasoline to dispensing facilities also exempt from this requirement.

(c) Bulk gasoline plants located in the Medford-Ashland AQMA, or in the Salem SATS, are exempt from the requirements in rule 340-22-110 (1)(b).

(d) Each stationary gasoline storage tank may release vapor to the atmosphere through a pressure relief valve set to release at the highest possible pressure (in accordance with State or local fire codes, or the National Fire Prevention Association guidelines) and no less than 3.4 kPa (.50 psi) or some other setting approved in writing by the Department.

(e) Gasoline ~~is~~ shall be handled in a manner to prevent spillage, discharging into sewers, storage in open containers, or handled in any other manner that would result in evaporation. If more than five gallons is spilled, the operator shall report the spillage in accordance with rules ~~340-21-065 to 340-21-075~~ 340-20-350 to 340-20-380.

~~[(2) The owner(s) or operator(s) of bulk gasoline plants and delivery vessels subject to this rule shall comply with the provisions of this rule by April 1, 1981, except where added equipment is required by rule changes adopted in 1980, compliance is delayed to April 1, 1983.]~~

(3) Compliance with subsection (1)(a) of this rule shall be determined by visual inspection to ensure minimal spillage of gasoline and proper installation of bottom loading couples.

(4) ~~[(3)]~~ Compliance with subsection (1)(b) of this rule shall be determined by verification of use of equipment approved by the Department and/or by testing and monitoring in accordance with applicable portions or rules 340-22-137 and/or Method 31 and/or 32 on file with the Department.

(5) ~~[(4)]~~ The owner or operator of a gasoline delivery vessel shall maintain the vessel to be vapor tight at all times, in accordance with rule 340-22-137(1), if such vessel is part of a vapor balance system required by these rules.

~~[(5) Rule 340-22-120 shall not apply to bulk plants which load 600,000 or less gallons of gasoline per year.]~~

Stat. Auth.: ORS CH. 468

Hist.: DEQ 21- 1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 12-1981 (Temp), f. & ef. 4-29-81; DEQ 3-1986, f. & ef. 2-12-86

### Bulk Gasoline Terminals

340-22-130 (1) ~~[(After April 1, 1981, n)]~~ No terminal owner or operator, shall allow volatile organic compounds (VOC) to be emitted into the atmosphere in excess of 80 milligrams of VOC per liter of gasoline loaded from the operation of loading truck tanks, and truck trailers at bulk gasoline terminals with a daily throughput of greater than 76,000 liters (20,000 gallons) per day of gasoline (determined by a thirty-day rolling average). ~~[(The daily through-puts are annual through-put divided by 365 days.)]~~

(a) The owner or operator of a gasoline loading terminal shall only allow the transfer of gasoline between the facility and a truck tank or a truck trailer when a current leak test certification for the delivery vessel is on file with the terminal or a valid inspection sticker (OAR 340-22-137(1)(c)) is displayed on the delivery vessel.

(b) The owner or operator of a truck tank or a truck trailer shall not make any connection to the terminal's gasoline loading rack unless the gasoline delivery vessel has been tested in accordance with OAR 340-22-137(1).

(c) The truck driver or other operator who fills a delivery truck tank and/or trailer tank shall not take on a load of gasoline unless the vapor return hose is properly connected.

(d) All equipment associated with the vapor recovery system shall be maintained to be vapor tight and in good working order.

(2) Compliance with section (1) of this rule shall be determined by testing in accordance with Method 33 on file with the Department. The method for determining compliance with section (1) of this rule are delineated in 40 CFR Part 60, Subpart XX, 60.503.

(3) Bulk Gasoline terminals shall comply with the following within the limits of section (1) of this rule:

(a) All displaced vapors and gases during tank truck gasoline loading operations are vented only to the vapor control system ~~except when gasoline delivery vessels are switched to diesel delivery service or to delivery of other VOC with Reid vapor pressure less than 4.0 psia~~.

(b) The loading device must not leak when in use. The loading device shall be designed and operated to allow no more than 10 cubic centimeters drainage per disconnect on the basis of 5 consecutive disconnects.

(c) All loading liquid lines shall be equipped with fittings which make vapor-tight connections and which close automatically and immediately when disconnected.

(d) All vapor lines shall be equipped with fittings which make vapor-tight connections and which close automatically and immediately when disconnected or which contain vapor-tight unidirectional valves.

(e) Gasoline is handles in a manner to prevent its being discarded in sewers or stored in open containers or handled in any manner that would result in evaporation. If more than 5 gallons are spilled, the operator shall report the spillage in accordance with rules ~~340-21-065 to 340-21-075~~ 340-20-350 to 340-20-380.

(f) The vapor collection system is operated in a manner to prevent the pressure therein from exceeding the tank truck or trailer pressure relief settings.

Stat. Auth.: ORS CH. 468

Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 12-1981 (Temp), f. & ef. 4-29-81; DEQ 3-1986, f. & ef. 2-12-86

340-22-133 [Renumbered to 340-33-130(2)]

340-22-136 [Renumbered to 340-22-130(3)]

#### Testing Vapor Transfer and Collection Systems

340-22-137 (1) ~~After April 17, 1981, n~~ No person shall allow a vapor-laden delivery vessel subject to rule 340-22-120 (5) ~~f(4)~~ to be filled or emptied unless the delivery vessel:



(a) Is tested annually according to the test method 32 on file with the Department, or ~~[with-EPA-Method-21]~~ CFR Part 60, EPA Method 21 or 27, or California Air Resources Board Method 2-5;

(b) Sustains a pressure change of not more than 750 pascals (3 inches of H<sub>2</sub>O) in 5 minutes when pressurized to a gauge pressure of 4,500 pascals (18 inches of H<sub>2</sub>O) or evacuated to a gauge pressure of 1,500 pascals (6 inches of H<sub>2</sub>O) during the testing required in subsection (1)(a) of this rule; and

(c) Displays a sticker near the Department of Transportation test date markings required by 49 CFR 177.824h, which:

(A) Shows the year and month that the gasoline tank truck last passed the test required in sections (a)(a) and (b) of this rule;

(B) Shows the identification of the sticker; and

(C) Expires not more than one year from the date of the leak-test test, or if tested in California, on the expiration date so specified.

(d) Has its vapor return hose connected by the truck operator so that gasoline vapor is not expelled to the atmosphere.

(2) ~~[After-April-1, 1981, -t]~~ The owner or operator of a vapor collection system subject to this regulation shall design and operate the vapor collection system and the gasoline loading equipment in a manner that prevents:

(a) Gauge pressure from exceeding 4,500 pascals (18 inches H<sub>2</sub>O) and vacuum from exceeding 1,500 pascals (6 inches of H<sub>2</sub>O) in the gasoline tank truck being loaded;

(b) A reading equal to or greater than 100 percent of the lower explosive limit (LEL, measured as propane) at 2.5 centimeters from all points on the perimeter of a potential leak source when measured by the Method 31 and 33 on file with the Department, or unloading operations at gasoline dispensing facilities, bulk plants and bulk terminals; and

(c) Visible liquid leaks during loading or unloading operations at gasoline dispensing facilities, bulk plants and bulk terminals.

(3) The Department may, at any time, monitor a gasoline tank truck, vapor collection system, or vapor control system, by the methods on file with the Department, to confirm continuing compliance with sections (1) or (2) of this rule.

(4) Recordkeeping and Reporting:

(a) The owner or operator of a source of volatile organic compounds subject to this regulation shall maintain records of all certification testing and repairs. The records must identify the gasoline tank truck, vapor collection system, or vapor control system; the date of the test or repair; and if applicable, the type of repair and the date of retest. The records must be maintained in a legible, readily available condition for at least two years after the date of testing or repair was completed.

(b) Copies of all records and reports under subsection (4)(a) of this rule shall immediately be made available to the Department, upon verbal or written request, at any reasonable time.

Stat. Auth.: ORS CH. 468

Hist.: DEQ 23-1980, f. & ef. 9-26-80; DEQ 12-1981 (Temp),  
f. & ef. 4-29-81; DEQ 3-1986, f. & ef. 2-12-86

### Cutback and Emulsified Asphalt

340-22-140 (1) ~~[After April 1, 1979, -u]~~ Use of any cutback asphalts for paving roads and parking areas is prohibited during the months of April, May, June, July, August, September, and October, except as provided for in section (2) of this rule.

(2) Slow curing (SC) and medium curing (MC) cutback asphalts are allowed during all months for the following uses and applications.

(a) Solely as a penetrating prime coat for aggregate bases prior to paving;

(b) For the manufacture of medium-curing patching mixes to provide long-period storage stockpiles used exclusively for pavement maintenance; or

(c) For all uses when the National Weather Service forecast of the high temperature during the 24-hour period following applications is below 10°C. (50°F.).

(3) Rapid curing (RC) grades of cutback asphalt are always prohibited.

(4)(a) Use of emulsified asphalts is unrestricted if solvent content is kept at or less than the limits listed below. If these limits are exceeded, then the asphalt shall be classified as medium curing (MC) cutback asphalts, and shall be limited to only the uses permitted by section (2) of this rule. (Grades of Emulsion Per AASHTO Designation M 208-72-Maximum Solvent Content by Weight):

- (A) CRS-1.....3%
- (B) CRS-2.....3%
- (C) CSS-1.....3%
- (D) CSS-1h.....3%
- (E) CMS-2.....8%
- (F) CMS-2h.....8%
- (G) CMS-2S.....12%

(b) Solvent content is determines by ASTM distillation test D-244.

Stat. Auth.: ORS CH. 468

Hist.: DEQ 21- 1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86

### Petroleum Refineries

340-22-150 ~~[After April 1, 1979, -t]~~ These regulations shall apply to all petroleum refineries:

(1) Vacuum-Producing Systems:

(a) Noncondensable VOC from vacuum producing systems shall be piped to an appropriate firebox, incinerator or to a closed refinery system.

(b) Hot wells associated with contact condensers shall be tightly covered and the collected VOC introduced into a closed refinery system.

(2) Wastewater Separators:

(a) Wastewater separators' forebays shall incorporate a floating pontoon or fixed solid cover with all openings sealed totally enclosing the compartmented liquid contents, or a floating pontoon or double deck-type cover equipped with closure seals between the cover edge and compartment wall.

(b) Accesses for gauging and sampling shall be designed to minimize VOC emissions during actual use. All access points shall be closed with suitable covers when not in use.

(3) Process Unit Turnaround:

(a) The VOC contained in process unit to be depressurized for turnaround shall be introduced to a closed refinery system, combusted by a flare, or vented to a disposal system.

(b) The pressure in a process unit following depressurization for turnaround shall be less than 5 psig before venting to the ambient air.

(4) Maintenance and Operation of Emission Control Equipment: Equipment for the reduction, collection or disposal of VOC shall be maintained and operated in a manner commensurate with the level of maintenance and house-keeping of the overall plant.

(5) Recordkeeping: The owner or operator shall maintain a record of process unit turnarounds including an approximation of the quantity of VOC emitted to the atmosphere. Records shall be maintained for two years.

Stat. Auth.: ORS CH. 468

Hist.: DEQ 21- 1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80

### Petroleum Refinery Leaks

340-22-153 (1) ~~After October 1, 1980, a~~ All persons operating petroleum refineries shall comply with the following rules concerning leaks;

(a) The owner or operator of a petroleum refinery complex, upon detection of a leaking component, which has a volatile organic compound concentration exceeding 10,000 ppm when tested in the manner described below shall:

(A) Include the leaking component on a written list of scheduled repairs; and

(B) Repair and retest the component within 15 days.

(b) Except for safety pressure relief valves, no owner or operator of a petroleum refinery shall install or operate a valve at the end of a pipe or line containing volatile organic compounds unless the pipe or line is sealed with a second valve, a blind flange, a plug, or a cap. The sealing device may be removed only when a sample is being taken during maintenance operations.

(c) Pipeline valves and pressure relief valves in gaseous volatile organic compound service shall be marked in some manner that will be readily obvious to both refinery personnel performing monitoring and the Department.

(2) Testing Procedures: Testing and calibration procedures to determine compliance with this regulation shall be done in accordance with EPA Method 21.

(3) Monitoring, Recordkeeping, Reporting:

(a) The owner or operator of a petroleum refinery shall maintain, as a minimum, records of all testing conducted under this rule; plus records of all monitoring conducted under subsections (b) and (c) of this section.

(b) The owner or operator of a petroleum refinery subject to this regulation shall:

(A) Monitor yearly by the methods referenced in section (2) of this rule all:

- (i) Pump seals;
- (ii) Pipeline valves in liquid service; and
- (iii) Process drains.

(B) Monitor quarterly by the methods referenced in section (2) of this rule all:

- (i) Compressor seals;
- (ii) Pipeline valves in gaseous service; and
- (iii) Pressure relief valves in gaseous service.

(C) Monitor weekly by visual methods all pump seals;

(D) Monitor immediately any pump seal from which liquids are observed dripping;

(E) Monitor any relief valve within 24 hours after it has vented to the atmosphere; and

(F) Monitor immediately after repair of any component that was found leaking.

(c) Pressure relief devices which are connected to an operating flare header, vapor recovery device, inaccessible valves, storage tank valves, or valves that are not externally regulated are exempt from the monitoring requirements in subsection (b) of this section.

(d) The owner or operator of a petroleum refinery, upon the detection of a leaking component, shall affix a weatherproof and readily visible tag bearing an identification number and the date the leak is located to the leaking component. This tag shall remain in place until the leaking component is repaired.

(e) The owner or operator of a petroleum refinery, upon the completion of each yearly and/or quarterly monitoring procedure, shall:

(A) Submit a report to the Department on the 15th day of January, April, July, and September, listing the leaking components that were located but not repaired within the required time limit in subsection (1)(a) of this rule;

(B) Submit a signed statement attesting to the fact that, with the exception of those leaking components listed in paragraph (A) of this subsection, all monitoring and repairs were performed as stipulated.

(f) The owner or operator of a petroleum refinery shall maintain a leaking component monitoring log which shall contain, at a minimum, the following data:

(A) The name of the process unit where the component is located;

- (B) The type of component (e.g., valve, seal);
  - (C) The tag number of the component;
  - (D) The date on which a leaking component is discovered;
  - (E) The date on which a leaking component is repaired; and
  - (F) The date and instrument reading of the recheck procedure after a leaking component is repaired;
  - (G) A record of the calibration of the monitoring instrument;
  - (H) Those leaks that cannot be repaired until turnaround, (exceptions to the 15 day requirement of paragraph (1)(a)(B) or this rule;
  - (I) The total number of components checked and the total number of components found leaking.
- (g) Copies of all records and reports required by this section shall be retained by the owner or operator for a minimum of two years after the date on which the record was made or the report submitted.
- (h) Copies of all records and reports required by this section shall immediately be made available to the Department upon verbal or written request at any reasonable time.
- (i) The Department may, upon written notice, modify the monitoring, recordkeeping and reporting requirements.
- ~~(4) Exemptions:--This rule does not apply to components handling liquids with a true vapor pressure of less than 10.5 kPa (1.52 psia), where the true vapor pressure is determined at the highest temperature at which the liquid is handled or stored.~~

Stat. Auth.: ORS CH. 468

Hist.: DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86

### Liquid Storage

340-22-160 (1) ~~[After April 1, 1981, o]~~ Owners or operators which have tanks storing methanol or other volatile organic compound liquids with a true vapor pressure, as stored, greater than 10.5 kPa (kilo Pascals) (1.52 psia), ~~[but less than 76.7 kPa (11.1 psia),]~~ at actual monthly average storage temperatures, and having a capacity greater than 150,000 liters (approximately 39,000 gallons) shall comply with one of the following:

(a) Meet the equipment specifications and maintenance requirements of the federal standards of performance for new stationary sources - Storage Vessels for Petroleum Liquids, 40 CFR 60 Subpart K, and Ka, as amended by Federal Register, April 4, 1980, pages 23379 through 23381;

(b) Be retrofitted with a floating roof or internal floating cover using at least a nonmetallic resilient seal as the primary seal meeting the equipment specifications in the federal standards referred to in subsection (a) of this rule or its equivalent;

(2) All seals used in subsections (1)(b) and (c) of this rule are to be maintained in good operating condition and the seal fabric shall contain no visible holes, tears or other openings.

(3) All openings, except stub drains and those related to safety (such as slotted gage wells), are to be sealed with suitable closures. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place; except for slotted gage wells which must have floating seals with one half inch edge gaps or less.

(4) Secondary Seals:

(a) Applicability: Subsection (c) of this section applies to all VOC liquid storage vessels equipped with external floating roofs, having capacities greater than 150,000 liters (39,000 gallons).

(b) Exemptions: Subsection (c) of this section does not apply to petroleum liquid storage vessels which:

(A) Are used to store waxy, heavy pour crude oil;

(B) Have capacities less than 1,600,000 liters (420,000 gallons) and are used to store produced crude oil and condensate prior to lease custody transfer;

(C) Contain a VOC liquid with a true vapor pressure of less than 10.5 kPa (1.5 psia) where the vapor pressure is measured at the storage temperature;

(D) Contain a VOC liquid with a true vapor pressure less than 27.6 kPa (4.0 psia):

(i) Are of welded construction; and

(ii) Presently possess a metallic-type shoe seal, a liquid mounted foam seal, a liquid-mounted liquid filled type seal, or other closure device of demonstrated equivalence approved by the Department: or

(E) Are of welded construction, equipped with a metallic type shoe primary seal and has a secondary seal from the top of the shoe seal to the tank wall (shoemounted secondary seal).

(c) ~~[After-December-31,-1981,-n]~~ No owner of a VOC liquid storage vessel subject to this rule shall store VOC liquid in that vessel unless:

(A) The vessel has been fitted with:

(i) A continuous secondary seal extending from the floating roof to the tank wall (rim-mounted secondary seal); or

(ii) A closure or other device which controls VOC emissions with an effectiveness equal to or greater than a seal required under paragraph (A)(i) of this subsection as approved in writing by the Department.

(B) All seal closure devices meet the following requirements:

(i) There are no visible holes, tears, or other openings in the seal(s) or seal fabric;

(ii) The seal(s) are intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank wall; and

(iii) For vapor mounted seals, the accumulated area of gaps exceeding 0.32 cm (1/8 inch) in width between the secondary seal and the tank wall are determined by the method in subsection (d) of this section and shall not exceed 21.2 cm<sup>2</sup> per meter of tank diameter (1.0 in<sup>2</sup> per foot of tank diameter).

(C) All openings in the external floating roof, except for automatic bleeder vents, rim space vents, and leg sleeves,

(i) Equipped with covers, seals, or lids in the closed position except when the openings are in actual use; and

(ii) Equipped with projections into the tank which remain below the liquid surface at all times.

(D) Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports;

(E) Rim vents are set to open only when the roof is being floated off the leg supports or at the manufacturer's recommended setting; and

(F) Emergency roof drains are provided with slotted membrane fabric covers or equivalent covers which cover at least 90 percent of the area of the opening;

(G) The owner or operator of a VOC liquid storage vessel with an external floating roof subject to subsection (c) of this section shall:

(i) Perform routine inspections semi-annually [~~once-per year~~] in order to ensure compliance with paragraphs (A) through (F) of this subsection and the inspections shall include a visual inspection of the secondary seal tag;

(ii) Measure the secondary seal gap annually in accordance with subsection (d) of this section when the floating roof is equipped with a vapor-mounted primary seal; and

(iii) Maintain records of the types of VOC liquids stored, the maximum true vapor pressure of the liquid as stored, and the results of the inspections performed in subparagraphs (G)(i) and (ii).

(H) The owner or operator of a VOC liquid storage vessel with an external floating roof not subject to this regulation but containing a VOC liquid with a true vapor pressure greater than 7.00 kPa (1.0 psi), shall maintain records of the average monthly storage temperature, the type of liquid, and the maximum true vapor pressure for all VOC liquids with a true vapor pressure greater than 7.0 kPa;

(I) The owner or operator of a VOC liquid storage vessel subject to this regulation, shall submit to the Department, as a minimum, annual reports summarizing the inspections;

(J) Copies of all records and reports under paragraphs (G)(H), and (I) of this section shall be retained by the owner or operator for a minimum of two years after the date on which the record was made or the report submitted;

(K) Copies of all records and reports under this section shall immediately be made available to the Department, upon verbal or written request, at any reasonable time;

(L) The Department may, upon written notice, require more frequent reports or modify the monitoring and recordkeeping requirements, when necessary to accomplish the purposes of this rule.

(d) Secondary Seal Compliance Determination:

(A) The owner or operator of any volatile organic compound source required to comply with section (4) of this rule shall demonstrate compliance by the methods of this section or an alternative method approved by the Department.

(B) A person proposing to conduct a volatile organic compound emissions test shall notify the Department of the intent to test not less than 30 days before the proposed initiation of the tests so the Department may observe the test. The notification shall contain the information required by, and be in a format approved by the Department.

(C) Compliance with paragraph (c)(B)(iii) of this section shall be determined by:

(i) Physically measuring the length and width of all gaps around the entire circumference of the secondary seal in each place where a 0.32 cm (1/8 inch) uniform diameter probe passes freely (without forcing or binding against the seal) between the seal and tank wall; and

(ii) Summing the area of the individual gaps.

Stat. Auth.: ORS CH. 468

Hist.: DEQ 21-1978, f. & ef. 12-28-78 ; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86

#### Surface Coating in Manufacturing

340-22-170 (1) ~~{After 3-17-1982, n}~~ No person shall operate a coating line which emits into the atmosphere volatile organic compounds in excess of the limits in subsection (5) of this rule, expressed as pounds VOC per gallon of coating applied, excluding water, unless an alternative emission limit is approved by the Department pursuant to subsection (3) or emissions are controlled to an equivalent level pursuant to subsection (7) of this rule ~~{greater than the amounts in section (4) of this rule per volume of coating excluding water as delivered to the coating applicators. The limitations shall be based on a daily average except subsection (4)(e) of this rule shall be based on a monthly average. Daily monitoring and monthly reporting of emissions are required after July 1, 1980, for sources emitting more than 1,000 tons per year of VOC, unless exempted as unnecessary by the Department in writing}~~.

(2) Exemptions ~~{Exceptions}~~:

(a) This rule does not apply to airplanes painted out of doors in open air; automobile and truck refinishing; customized top coating of automobiles and trucks, if production is less than 35 vehicles per day; marine vessels and vessel parts painted out in the open air; flat wood coating; wood furniture and wood cabinets; wooden doors, mouldings, and window frames; machine staining of exterior wood siding; high temperature coatings (for service above 500°F.); lumber marking coatings; potable water tank inside coatings; high performance inorganic zinc coatings, air dried, applied to fabricated steel; and ~~{paint used to apply}~~ markings by stencil for railroad cars.



- (b) This rule does not apply to:
  - (A) Sources, regulated by this rule, whose potential emissions before add on controls of volatile organic compounds are less than 10 tons per year (or 3 lb VOC/hr or 15 lb VOC/day actual) ~~{40-tens-per-year}~~; or
  - (B) Sources used exclusively for chemical or physical analysis or determination of product quality and commercial acceptance (such as research facilities, pilot plant operations, and laboratories) unless:
    - (i) The operation of the source is an integral part of the production process; or
    - (ii) The emissions from the source exceed 363 kilograms (800 pounds) in any calendar month.

(3) Exceptions:

(a) On a case-by-case basis, the Department may approve exceptions to the emission limits specified in subsection (5) of this rule, upon documentation by the source that an alternative emission limit would satisfy the federal criteria for reasonably available control technology (RACT).

(b) Included in this documentation must be a complete analysis of technical and economic factors which:

(A) Prevent the source from using both compliance coatings and pollution control equipment; and

(B) Justify the alternative emission limit sought by the source.

(c) The alternative emission limit approved by the Department shall be incorporated into the source's Air Contaminant Discharge Permit and shall not become effective until approved by EPA as a source specific SIP revision.

(4) ~~{3}~~Applicability: This rule applies to each coating line, which includes the application area(s), flashoff area(s), air and forced air drier(s), and oven(s) used in the surface coating of the metal parts and products in subsections (5) ~~{4}~~ (a) through (j) of this rule.

(5) ~~{4}~~Process and Limitation: ~~{Stringency:}~~ These emission limitations shall be based on a daily average except subsection (5)(e) of this rule shall be based on a monthly average. If more than one emission limitation in this rule applies to a specific coating, then the most ~~{least}~~ stringent emission limitation shall be applied. ~~{Process-and-Limitation:}~~

(a) Can Coating:

(A) Sheet basecoat (exterior and interior) and over-varnish; two-piece can exterior (basecoat and over-varnish).....2.8 lb/gal.

(B) Two- and three-piece can interior and exterior body spray, two-piece can exterior end (spray or roll coat).....4.2 lb/gal.

(C) Three-piece can side-seam spray.....5.5 lb/gal.

(D) End sealing compound.....3.7 lb/gal.

(E) End Sealing Compound for fatty foods..... ~~{4-4}~~ 3.7 lb/gal.

(b)	Fabric Coating.....	2.9	
lb/gal.			
(c)	Vinyl Coating.....	3.8	
lb/gal.			
(d)	Paper Coating.....	2.9	
lb/gal.			
(e)	Existing Coating of Paper and Film in the Medford-Ashland AQMA		
.....		55	lb.*
	* 55 lb VOC per 1000 sq. yds. of material per pass.		
(f)	Auto and Light Duty Truck Coating:		
(A)	Prime.....	1.9	
lb/gal.			
(B)	Topcoat.....	2.8	
lb/gal.			
(C)	Repair.....	4.8	
lb/gal.			
(g)	Metal Furniture Coating.....	3.0	
lb/gal.			
(h)	Magnet Wire Coating.....	1.7	
lb/gal.			
(i)	Large Appliance Coating.....	2.8	
lb/gal.			
(j)	Miscellaneous Metal Parts and Products:		
(A)	Clear Coatings.....	4.3	
lb/gal.			
(B)	Force Air Dried or Air Dried.....	3.5	
lb/gal.			
(C)	Extreme Performance Coatings.....	3.5	
lb/gal.			
(D)	Other Coatings (i.e., Powder, oven dried).....	3.0	
lb/gal.			
(E)	High Performance Architectural Coatings <del>[on-Aluminum]</del>		
.....	<del>[6-2]</del> 3.5 lb/gal.		

(6) ~~[(5)]~~ Compliance Determination: Compliance with this rule shall be determined by testing in accordance with 40 CFR Part 60 EPA Method 18, 24, 25, a material balance method, or an equivalent plant specific method approved by and on file with the Department. The limit in section (1) of this rule of VOC in the coating is based upon an assumed solvent density, and other assumptions unique to a coating line; where conditions differ, such as a different solvent density, a plant specific limit developed pursuant to the applicable Control Technology Guideline document may be submitted to the Department for approval.

(7) ~~[(6)]~~ Reduction Method: The emission limits of subsection ~~[(1)]~~ (3) and (5) of this rule shall be achieved by:

(a) The application of low solvent content coating technology ~~[(formulations which directly meet the values required)]~~; ~~for~~

(b) An incineration system which oxidizes at least 90.0 percent of the nonmethane volatile organic compounds entering the incinerator (VOC measured as total combustible carbon) to carbon dioxide and water; or

(c) An equivalent means of VOC removal. The equivalent means must be approved ~~[in writing]~~ by the Department and will be incorporated in the sources' Air Contaminant Discharge Permit, and shall not become effective until approved by EPA as a source-specific SIP revision. Other alternative emission controls approved by the Department and allowed by EPA may be used to provide an equivalent means of VOC removal. [A capture system must be used in conjunction with the emission control systems in subsections (6)(b) and (e) of this rule. The design and operation of a capture system must be consistent with good engineering practice and shall be required to enable overall emission reduction equivalent to the emission limitations in section (1) of this rule.]

(8) Recordkeeping Requirements:

(a) A current list of coatings shall be maintained which provides all the coating data necessary to evaluate compliance, including the following information, where applicable:

- (A) Coating catalyst and reducer used;
- (B) Mix ratio of components used;
- (C) VOC content of coating as applied; and
- (D) Oven temperature.

(b) Where applicable, a monthly record shall be maintained indicating the type and amount of solvent used for cleanup and surface preparation.

(c) Such records shall be retained and available for inspection by the Department for a period of two years.

Stat. Auth.: ORS Ch. 468

Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86

Aerospace Component Coating Operations

340-22-175 (1) No owner or operator of an aerospace component coating facility shall emit into the atmosphere volatile organic compounds in excess of the following limits, expressed as pounds VOC per gallon of coating applied, excluding water, unless an alternative emission limit is approved by the Department pursuant to subsection (4) or emissions to the atmosphere are controlled to an equivalent level pursuant to subsection (10) of this rule:

<u>(a) Primer.....</u>	<u>2.9</u>
<u>lb/gal.</u>	
<u>(b) Interior Topcoat.....</u>	<u>2.8</u>
<u>lb/gal.</u>	
<u>(c) Electric or Radiation Effect Coating.....</u>	<u>6.7</u>
<u>lb/gal.</u>	
<u>(d) Extreme Performance Interior Topcoat.....</u>	<u>5.0</u>
<u>lb/gal.</u>	
<u>(e) Fire Insulation Coating.....</u>	<u>5.0</u>
<u>lb/gal.</u>	

<u>(f)</u>	<u>Fuel Tank Coating.....</u>	<u>6.0</u>
<u>lb/gal.</u>		
<u>(g)</u>	<u>High Temperature Coating*.....</u>	<u>6.0</u>
<u>lb/gal.</u>		
<u>(h)</u>	<u>Sealant.....</u>	<u>5.0</u>
<u>lb/gal.</u>		
<u>(i)</u>	<u>Self Priming Topcoat.....</u>	<u>3.5</u>
<u>lb/gal.</u>		
<u>(j)</u>	<u>Topcoat.....</u>	<u>5.0</u>
<u>lb/gal.</u>		
<u>(k)</u>	<u>Pretreatment Wash Primer.....</u>	<u>6.5</u>
<u>lb/gal.</u>		
<u>(l)</u>	<u>Sealant Bonding Primer.....</u>	<u>6.0</u>
<u>lb/gal.</u>		
<u>(m)</u>	<u>Temporary Protective Coating.....</u>	<u>2.1</u>
<u>lb/gal.</u>		

\* (For conditions between 350°F - 500°F)

(2) After January 1, 1992, the emission limits for coatings in subsections (l)(d), (j), and (k), shall not exceed 3.5 lb/gal.

(3) Exemptions: This rule does not apply to the following:

(a) The exterior of fully assembled airplanes painted out of doors, high temperature coatings (for conditions over 500°F), adhesive bonding primer, flight test coatings, and space vehicle coatings.

(b) Sources, regulated by this rule, whose potential emissions before add on controls of volatile organic compounds are less than 10 tons per year (or 3 lb VOC/hr or 15 lb VOC/day actual).

(c) The use of separate coating formulations in volumes of less than 20 gallons per calendar year. No source shall use more than a combined total of 250 gallons per calendar year of exempt coatings. Records of coating usage shall be maintained as per section 340-22-175 (8), or

(d) Sources used exclusively for chemical or physical analysis or determination of product quality and coating performance (such as research facilities and laboratories) unless:

(A) The operation of the source is an integral part of the production process; or

(B) The emissions from the source exceed 363 kilograms (800 pounds) in any calendar month.

(4) Exceptions:

(a) On a case-by-case basis, the Department may approve exceptions to the emission limits specified in subsection (1) of this rule, upon documentation by the source that an alternative emission limit would satisfy the federal criteria for reasonably available control technology (RACT).

(b) Included in this documentation must be a complete analysis of technical and economic factors which:

(A) Prevent the source from using both compliance coatings and pollution control equipment; and

(B) Justify the alternative emission limit sought by the source.

(c) The alternative emission limit approved by the Department shall be incorporated into the source's Air Air Contaminant Discharge Permit and shall not become effective until approved by EPA as a source-specific SIP revision.

(5) Applicability: This rule applies to each coating line, which includes the application area(s), flashoff area(s), air and forced air drier(s), and oven(s) used in the surface coating of aerospace components in subsection (1)(a) through (m) of this rule. If more than one emission limitation in this rule applies to a specific coating, then the most stringent emission limitation shall be applied.

(6) Solvent Evaporation Minimization:

(a) Closed containers shall be used for the storage or disposal of cloth or paper used for solvent surface preparation and cleanup.

(b) Fresh or spent solvent shall be stored in closed containers.

(c) Organic compounds shall not be used for the cleanup of spray equipment unless equipment is used to collect the cleaning compounds and to minimize their evaporation.

(d) Containers of coating, catalyst, thinner, or solvent shall not be left open to the atmosphere when not in use.

(7) Stripper Limitations: No stripper shall be used which contains more than 400 grams/liter (3.3 lbs/gal) of VOC or which has a true vapor pressure of 1.3 kPa (0.19 psia) at actual usage temperature.

(8) Maskant for Chemical Processing Limitation: No maskant shall be applied for chemical processing unless the VOC emissions from coating operations are reduced by 85 percent, or the coating contains less than 600 grams/liter (5.0 lbs/gal) of VOC of coating excluding water, as applied.

(9) Compliance determination: Compliance with this rule shall be determined by testing in accordance with 40 CFR Part 60 Appendix A Method 24 for determining the VOC content of the coating materials. Emissions from the coating processes and/or VOC emissions control efficiencies shall be determined by testing in accordance with 40 CFR Part 60 Appendix A Method 18, 25, California Method ST-7, a material balance method, or an equivalent plant specific method approved by EPA and the Department and on file with the Department. The limit in section (1) of this rule of VOC in the coating is based upon an assumed solvent density, and other assumptions unique to a coating line; where conditions differ, such as a different solvent density, a plant specific limit may be submitted to the Department and EPA for approval.

(10) Reduction Method: The emission limits of subsection (1) of this rule shall be achieved by:

(a) The application of a low solvent content coating technology;

(b) A vapor collection and disposal system; or

(c) An equivalent means of VOC removal. The equivalent means must be approved by the Department and will be incorporated in the source's Air Contaminant Discharge Permit, and shall not become effective until approved by EPA as a source-specific SIP revision. Other alternative emission controls approved by the Department and allowed by EPA may be used to provide an equivalent means of VOC removal.

(11) Recordkeeping Requirements:

(a) A current list of coatings shall be maintained which provides all of the coating data necessary to evaluate compliance, including the following information, where applicable:

(A) A daily record indicating the mix ratio of components used; and

(B) The VOC content of the coating as applied.

(b) A monthly record shall be maintained indicating the type and amount of solvent used for cleanup and surface preparation.

(c) A monthly record shall be maintained indicating the amount of stripper used.

(d) Such records shall be retained and available for inspection by the Department for a period of two years.

Stat. Auth.: ORS CH. 468

Hist.: DEQ

**Degreasers**

340-22-180 Cold cleaners open top vapor degreasers, and conveyorized degreasers are exempt from the following rules if they use fluids which are not photochemically reactive. These fluids are:  $C_2Cl_3F_3$  trichlorotrifluoroethane, also known as Freon 113 or Freon TF;  $CH_2Cl_2$  methylene chloride; 1, 1, 1- $C_2H_3Cl_3$ , methyl chloroform, also known as 1-1-1 trichloroethane or chlorothen VG.

(1) The owner or operator of dip tank cold cleaners shall comply with the following equipment specifications after April 1, 1980:

(a) Be equipped with a cover that is readily opened and closed. This is required of all cold cleaners, whether a dip tank or not;

(b) Be equipped with a drainrack, suspension basket, or suspension hoist that returns the drained solvent to the solvent bath;

(c) Have a freeboard ratio of at least 0.5;

(d) Have a visible fill line.

(2) An owner or operator of a cold cleaner shall be responsible for following the required operating parameters and work practices. The owner shall post and maintain in the work area of each cold cleaner a pictograph or instructions clearly explaining the following work practices:

(a) The solvent level shall not be above the fill line;

(b) The spraying of parts to be cleaned shall be performed only within the confines of the cold cleaner;

(c) The cover of the cold cleaner shall be closed when not in use or when parts are being soaked or cleaned by solvent agitation;

(d) Solvent-cleaned parts shall be rotated to drain cavities or blind holes and then set to drain until dripping has stopped;

(e) Waste solvent shall be stored in covered containers and returned to the supplier or a disposal firm handling solvents for final disposal, such that no greater than 20 percent of the waste (by weight) can evaporate into the atmosphere. Handling of the waste must also be done in accordance with the Department's solid and Hazardous Waste Rules, OAR 340-100.

(3) The owner or operator shall maintain cold cleaners in good working condition and free of solvent leaks.

(4) If the solvent has a volatility greater than 2.0 kPa (0.3 psi) measured at 38°C. (100°F.), or if the solvent is agitated or heated, then the cover must be designed so that it can be easily operated with one hand or foot.

(5) If the solvent has a volatility greater than 4.3 kPa (0.6 psi) measured at 38°C. (100°F.), then the drainage facility must be internal, so that parts are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

(6) If the solvent has a volatility greater than 4.3 kPa (0.6 psi) measured at 38°C. (100°F.), or if the solvent is heated above 50°C. (120°F.), then one of the following solvent vapor control systems must be used:

(a) The freeboard ratio must be equal to or greater than 0.70; or

(b) Water must be kept over the solvent, which must be insoluble in and heavier than water; or

(c) Other systems of equivalent control, such as a refrigerated chiller.

Stat. Auth.: ORS Ch. 468

Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86

#### Open Top Vapor Degreasers

340-22-183 (1) The owner or operator of all open top vapor degreasers shall comply with the following equipment specifications ~~{after April 1, 1980}~~:

(a) Be equipped with a cover that may be readily opened and closed. When a degreaser is equipped with a lip exhaust, the cover shall be located below the lip exhaust. The cover shall move horizontally or slowly so as not to agitate and spill the solvent vapor. The degreaser shall be equipped with at least the following three safety switches:

(A) Condenser flow switch and thermostat - (shuts off sump heat if coolant is either not circulating or too warm).

(B) Spray safety switch - (shuts off spray pump or conveyor if the vapor level drops excessively, e.g., greater than 10 cm (4 inches)).

(C) Vapor level control thermostat - (shuts off sump heat when vapor level rises too high).

(b) Have the following:

(A) A closed design such that the cover opens only when the part enters or exits the degreaser (and when the degreaser starts up, forming a vapor layer, the cover may be opened to release the displaced air) and either;

(B) A freeboard ratio equal to or greater than 0.75; or

(C) A freeboard, refrigerated or cold water, chiller.

(c) Post a permanent and conspicuous pictograph or instructions clearly explaining the following work practices:

(A) Do not degrease porous or absorbent materials such as cloth, leather, wood or rope;

(B) The cover of the degreaser should be closed at all times except when processing workloads;

(C) When the cover is open the lip of the degreaser should not be exposed to steady drafts greater than 15.3 meters per minute (50 feet/minute);

(D) Rack parts so as to facilitate solvent drainage from the parts;

(E) Workloads should not occupy more than one-half of the vapor-air interface area;

(F) When using a powered hoist, the vertical speed of parts in and out of the vapor zone should be less than 3.35 meters per minute (11 feet/minute);

(G) Degrease the workload in the vapor zone until condensation ceases;

(H) Spraying operations should be done within the vapor layer;

(I) Hold parts in the degreaser until visually dry;

(J) When equipped with a lip exhaust, the fan should be turned off when the cover is closed;

(K) The condenser water shall be turned on before the sump heater when starting up a cold vapor degreaser. The sump heater should be turned off and the solvent vapor layer allowed to collapse before closing the condenser water when shutting down a hot vapor degreaser;

(L) Water shall not be visible in the solvent stream from the water separator;

(2) A routine inspection and maintenance program shall be implemented for the purpose of preventing and correcting solvent losses, as for example, from dripping drain taps, cracked gaskets, and malfunctioning equipment. Leaks must be repaired immediately.

(3) Sump drainage and transfer of hot or warm solvent shall be carried out using threaded or other leakproof couplings.

(4) Still and sump bottoms shall be kept in closed containers.



(5) Waste solvent shall be stored in covered containers and returned to the supplier or a disposal firm handling solvents for final disposal, such that no greater than 20 percent of the waste (by weight) can evaporate into the atmosphere. Handling of the waste must also be done in accordance with the Department's Solid and Hazardous Waste Rules, OAR 340-100.

(6) Exhaust ventilation shall not exceed 20 m<sup>3</sup>/minute per m<sup>2</sup> (65 cfm per foot<sup>2</sup>) of degreaser open area, unless necessary to meet OSHA requirements. Ventilation fans shall not be used near the degreaser opening.

Stat. Auth.: ORS Ch. 468

Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86

### Conveyorized Degreasers

340-22-186 (1) The owner or operator of conveyorized cold cleaners and conveyorized vapor degreasers shall comply with the following operating requirements ~~[after April 1, 1980]~~:

(a) Exhaust ventilation should not exceed 20 cubic meters per minute of square meter (65 cfm per foot<sup>2</sup>) of degreaser opening, unless necessary to meet OSHA requirements. Workplace fans should not be used near the degreaser opening.

(b) Post in the immediate work area a permanent and conspicuous pictograph or instructions clearly explaining the following work practices:

(A) Rack parts for best drainage;

(B) Maintain vertical speed of conveyed parts to less than 3.35 meters per minute (11 feet/minute);

(C) The condenser water shall be turned on before the sump heater when starting up a cold vapor degreaser. The sump heater shall be turned off and the solvent vapor layer allowed to collapse before closing the condenser water when shutting down a hot vapor degreaser.

(2) A routine inspection and maintenance program shall be implemented for the purpose of preventing and correcting solvent losses, as for example, from dripping drain taps, cracked gaskets, and malfunctioning equipment. Leaks must be repaired immediately.

(3) Sump drainage and transfer of hot or warm solvent shall be carried out using threaded or other leakproof couplings.

(4) Still and sump bottoms shall be kept in closed containers.

(5) Waste solvent shall be stored in covered containers and returned to the supplier or a disposal firm handling solvents for final disposal, such that no greater than 20 percent of the waste (by weight) can evaporate into the atmosphere. Handling of the waste must also be done in accordance with the Department's Solid and Hazardous Waste Rules, OAR 340-100.

(6) All conveyORIZED cold cleaners and conveyORIZED vapor degreasers with air/vapor interfaces of 2.0 m<sup>2</sup> or greater shall have one of the following major control devices installed and operating ~~[after April 17, 1982]~~:

(a) Carbon adsorption system, exhausting less than 25 ppm of solvent averaged over a complete adsorption cycle (based on exhaust ventilation of 15 m<sup>3</sup>/minutes per m<sup>2</sup> of air/vapor area, when down-time covers are open); or

(b) Refrigerated chiller with control effectiveness equal to or better than subsection (a) of this section; or

(c) A system with control effectiveness equal to or better than subsection (a) of this section.

Stat. Auth.: ORS Ch. 468

Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86

#### Asphaltic and Coal Tar Pitch Used for Roofing Coating

340-22-190 (1) ~~[A]~~ No person shall ~~[not]~~ operate or use equipment ~~[after April 17, 1980]~~ for melting, heating or holding asphalt or coal tar pitch for the on-site construction, installation, or repair of roofs unless the gas-entrained effluents from such equipment are contained by close fitting covers.

(2) A person operating equipment subject to this rule shall maintain the temperature of the asphaltic or coal tar pitch below 285°C. (550°F.), or 17°C. (30°F.) below the flash point whichever is the lower temperature, as indicated by a continuous reading thermometer.

(3) The provisions of this rule shall not apply to equipment having a capacity of 100 liters (26 gallons) or less; or to equipment having a capacity of 600 liters (159 gallons) or less provided it is equipped with a tightly fitted lid or cover.

Stat. Auth.: ORS Ch. 468

Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80

#### Flat Wood Coating

340-22-200 (1) This rule applies to all flat wood manufacturing and surface finishing facilities, that manufacture the following products:

(a) Printed interior panels made of hardwood plywood and thin particle board;

(b) Natural finish hardwood plywood panels; or

(c) Hardboard paneling with Class II finishes.

(2) This rule does not apply to the manufacture of exterior siding, tileboard, particle board used as a furniture component, or paper or plastic laminates on wood or wood-derived substrates.

(3) ~~[After December 31, 1982, n]~~ No owner or operator of a flat wood manufacturing facility subject to this regulation shall emit volatile organic compounds from a coating application system in excess of:

(a) 2.9 kg per 100 square meters of coated finished product (6.0 lb/1,000 square feet) from printed interior panels, regardless of the number of coats applied;

(b) 5.8 kg per 100 square meters of coated finished product (12.0 lb/1,000 square feet) from natural finish hardwood plywood panels, regardless of the number of coats applied; and

(c) 4.8 kg per 100 square meters of coated finished product (10.0 lb/1,000 square feet) from Class II finishes on hardboard panels, regardless of the number of coats applied.

(4) The emission limits in section (3) of this rule shall be achieved by:

(a) The application of low solvent content coating technology; or

(b) An incineration system which oxidizes at least 90.0 percent of the nonmethane volatile organic compounds entering the incinerator (VOC measured as total combustible carbon) to carbon dioxide and water; or

(c) An equivalent means of VOC removal. The equivalent means must be approved in writing by the Department. The time period used to determine equivalency shall not exceed twenty-four hours.

(5) A capture system must be used in conjunction with the emission control systems in subsections (4)(b) and (c) of this rule. The design and operation of a capture system must be consistent with good engineering practice and shall be required to provide for an overall emission reduction sufficient to meet the emission limitations in section (3) of this rule.

(6) Compliance Demonstration:

(a) The owner or operator of a volatile organic compound source required to comply with this rule shall demonstrate compliance by the methods of subsection (c) of this section, or an alternative method approved by the Department.

(b) A person proposing to conduct a volatile organic compound emissions test shall notify the Department of the intent to test not less than 30 days before the proposed initiation of the tests so the Department may observe the test.

(c) Test procedures in 40 CFR Part 60 EPA Method 18, 24, or 25 shall be used to determine compliance with section (3) of this rule ~~[must be approved by the Department and be consistent with:~~

~~(A) EPA Guideline Series document, "Measurement of Volatile Organic Compounds", EPA-450/2-78-041; and~~

~~(B) Appendix A of "Control of Volatile Organic Emissions from Existing Stationary Sources -- Volume II: Surface Coating of Cans, Coils, Paper, Fabrics, Automobile, and Light-Duty Trucks", EPA-450/77-008].~~

(d) The Department may accept, instead of the coating analysis required by paragraph (c)(A) ~~{(f+i)}~~ of this section, a certification by the coating manufacturer of the composition of the coating, if supported by actual batch formulation records. In the event of any inconsistency between a Method 18, 24, or 25 test and a facility's formulation data, the Method 18, 24, or 25 test will govern.

(e) If add-on control equipment is used, continuous monitors of the following parameters shall be installed, periodically calibrated, and operated at all times that the associated control equipment is operating:

- (A) Exhaust gas temperature of all incinerators;
- (B) Temperature rise across a catalytic incinerator bed; and
- (C) Breakthrough of VOC on a carbon absorption unit.

Stat. Auth.: ORS Ch. 468

Hist.: DEQ 23-1980, f. & ef. 9-26-80

#### Rotogravure and Flexographic Printing

340-22-210 (1) ~~{After July 17, 1982, n}~~ No owner or operator of a packaging rotogravure, publication rotogravure, flexographic or specialty printing facility, with the potential to emit before add on controls greater ~~{emitting more}~~ than 90 mg/year (100 ton/year), employing ink containing solvent may operate, cause, allow or permit the operation of the press unless:

(a) The volatile fraction of ink, as it is applied to the substrate contains 25.0 percent by volume or less of organic solvent and 75 percent by volume or more of water; or

(b) The ink as it is applied to the ~~{substitute}~~ substrate, less water, contains 60.0 percent by volume or more nonvolatile material; or

(c) The owner or operator installs and operates:

(A) A carbon absorption system which reduces the volatile organic emissions from the capture system by at least 90.0 percent by weight;

(B) An incineration system which oxidizes at least 90.0 percent of the nonmethane volatile organic compounds (VOC measured as total combustible carbon) to carbon dioxide and water; or

(C) An alternative volatile organic compound emissions reduction system demonstrated to have at least a 90.0 percent reduction efficiency, measured across the control system, and has been approved by the Department.

(2) A capture system must be used in conjunction with the emission control systems in subsection (1)(c) of this rule. The design and operation of a capture system must be consistent with good engineering practice, and shall be required to provide for an overall reduction in volatile organic compound emissions of at least:

(a) 75.0 percent where a publication rotogravure process is employed;

(b) 65.0 percent where a packaging rotogravure process is employed; or

(c) 60.0 percent where a flexographic printing process is employed.

(3) Compliance Demonstration:

(a) Upon request of the Department, the owner or operator of a volatile organic compound source shall demonstrate compliance by the methods of this section or an alternative method approved by the Department. All tests shall be made by, or under the direction of, a person qualified by training and/or experience in the field of air pollution testing.

(b) A person proposing to conduct a volatile organic compound emissions test shall notify the Department of the intent to test not less than 30 days before the proposed initiation of the tests so the Department may observe the test. The notification shall contain the information required by, and be in a format approved by, the Department.

(c) Test procedures to determine compliance with this rule must be approved by the Department and consistent with:

(A) EPA test Method 18, 24, or 25, 40 CFR Part 60; or California Method ST-7. [EPA-Guideline-Series-document, "Measurement-of-Volatile-Organic-Compounds", EPA-450-/2-78-041, and

(B) Appendix-A-of-"Control-Volatile-Organic-Emissions-from Existing-Stationary-Sources-Volume-II:-Surface-Coating-of-Cans, Coils,-Paper,-Fabrics,-Automobiles,-and-Light-Duty-Trucks", EPA-450-/2-77-008,;

(B) [(e)]The Department may accept, instead of ink-solvent analysis, a certification by the ink manufacturer of the composition of the ink solvent, if supported by actual batch formulation records. In the event of any inconsistency between an EPA Method test and a facility's formulation data, the EPA Method test will govern.

(d) If add-on control equipment is used, continuous monitors of the following parameters shall be installed, periodically calibrated, and operated at all times that the associated control equipment is operating:

- (A) Exhaust gas temperature of all incinerators;
- (B) Breakthrough of VOC on a carbon adsorption unit; and
- (C) Temperature rise across a catalytic incinerator bed.

Stat. Auth.: ORS Ch. 468

Hist.: DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86

#### Perchloroethylene Dry Cleaning

340-22-220 (1) ~~[After-January-1,-1982-t]~~The owner or operator of a perchloroethylene dry cleaning facility shall:

- (a) Vent the entire dryer exhaust through a properly functioning carbon adsorption system or equally effective control device;
- (b) Emit no more than 100 ppmv of volatile organic compounds from the dryer control device before dilution;
- (c) Immediately repair all components found to be leaking liquid volatile organic compounds;

(d) Cook or treat all diatomaceous earth filters so that the residue contains 25 kg or less of volatile organic compounds per 100 kg of wet waste material;

(e) Reduce the volatile organic compounds from all solvent stills to 60 kg or less per 100 kg of wet waste material;

(f) Drain all filtration cartridges, in the filter housing, for at least 24 hours before discarding the cartridges; and

(g) When possible, dry all drained cartridges without emitting volatile organic compounds to the atmosphere.

(h) Any other filtration or distillation system can be used if equivalency is demonstrated. Any system reducing waste losses below 1 kg solvent per 100 kg clothes cleaned will be considered equivalent. For dry-to-dry configuration units, the following shall apply in lieu of subsection (1)(a) and (b) of this rule:

(A) The dryer/condenser system must be closed to the atmosphere at all times except when articles are being loaded or unloaded through the door of the machine.

(B) The dryer/condenser system must not vent to the atmosphere until the air-vapor stream temperature on the outlet side of the refrigerated condenser is equal to or less than 45°F.

(2) Exemptions: The requirements of subsections (1)(a) and (b) of this rule are not applicable to:

(a) Coin-operated facilities;

(b) Facilities where an absorber or other necessary control equipment cannot be accommodated because of inadequate space; or

(c) Facilities with insufficient steam capacity to desorb adsorbers; ~~for~~

~~(d) Small-facilities which consume less than 320-gallons-of perchloroethylene-per-year-}~~

(3) Compliance Demonstration: Compliance to this rule shall be demonstrated as follows:

(a) Compliance with subsections (1)(a), (f), and (g) or this rule shall be determined by means of a visual inspection.

(b) Compliance with subsections (1)(c) of this rule shall be determined by means of a visual inspection of the following components:

(A) Hose connections, unions, couplings and valves;

(B) Machine door gaskets and seatings;

(C) Filter head gasket and seating;

(D) Pumps;

(E) Base tanks and storage containers;

(F) Water separators;

(G) Filter sludge recovery;

(H) Distillation unit;

(I) Diverter valves;

(J) Saturated lint from lint basket; and

(K) Cartridge filters,

(c) Compliance with subsection (1)(b) of this rule shall be determined by:

(A) A test consistent with EPA Guideline Series document "Measurement of Volatile Organic Compounds", EPA-450/2-78-041 and in accordance with EPA Method 23 "Determination of Halogenated Organics from Stationary Sources" (proposed 43 FR 39766, June 11, 1980); or

(B) The proper installation, operation, and maintenance of equipment which has been demonstrated to be adequate to meet the emission limits of 100 ppmv.

(d) Compliance with subsections (1)(d) and (e) of this rule shall be determined by means of the procedure in the "Standard Test Method for Gasoline Diluent in Used Gasoline Engine Oils by Distillation", ANSI/ASTM D322.

Stat. Auth.: ORS Ch. 468

Hist.: DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86

#### STANDARD FOR AUTOMOTIVE GASOLINE

##### Reid Vapor Pressure for Gasoline

340-22-300 (1) No person shall sell or supply as a fuel for motor vehicles, during the period of June 1 through September 15 of each year, a gasoline having a Reid Vapor Pressure greater than ten and a half pounds per square inch (10.5 psi).

(a) This section shall not apply to gasoline delivered to retail outlets more than 14 days immediately preceding the periods established.

(b) Gasoline and ethyl alcohol blends of at least 9% by volume (gasohol) are given a one pound per square inch allowance, so as not to exceed an RVP of 11.5 psi.

(2) As used in this regulation, "gasoline" means any blend of petroleum distillate sold as a motor fuel having a Reid Vapor Pressure of more than four pounds as defined by the most current method of ASTM Method D 323, and meeting the other general specifications defined by the most current method of ASTM D 439 or D 4814.

(a) ASTM refers to the standards test methods and procedures published by the American Society for Testing and Materials.

(3) The Reid Vapor Pressure specified in paragraph (1) of this section shall be measured according to the procedures established in the most current method of ASTM D 323.

(4) The geographic coverage of this regulation shall be consistent with boundary specified in ASTM D 439, specifically all of Oregon, west of 122 degrees Longitude.

(5) Samples submitted to the Department by refiners or distributors of gasoline shall be sampled and tested pursuant to methods established by the most current method of ASTM D 323.

(6) The Department reserves the right to audit records and to sample gasoline for the purposes of compliance. Samples of petroleum shall be sampled pursuant and tested by methods established by the most current method of ASTM D 323 or by methods established under the California Air Resources rule, Title 13 §2251 or Part 80 of Title 40 of the Code of Federal Regulations - Fuel and Fuel Additives.

(7) Pursuant to ORS 468.130, civil penalties of not more than \$10,000 per day may be assessed for violation of paragraph 1 of this section at wholesale fuel facilities, including terminals, fleet facilities, cardlocks, and not more than \$2500 per day at retail.

(8) The effective date of this section is June 15, 1989.



**RULEMAKING STATEMENTS FOR  
PROPOSED VOC RULE AMENDMENTS**

STATEMENT OF NEED FOR RULEMAKING

Pursuant to ORS 183.335(7), this statement provides information on the intended action to amend a rule.

(1) Legal Authority

This proposal amends Oregon Administrative Rules (OAR) 340-22-100 to 340-22-300. It is proposed under authority of Oregon Revised Statutes (ORS) Chapter 468.020, 468.280, and 468.295.

(2) Need for these rules

To align the Department's Rules on General Emission Standards to Volatile Organic Compounds with federal Control Technology Guidelines (CTG), as part of the revision to the State Implementation Plan.

(3) Principal Documents Relied Upon

OAR 340, Division 22, General Gaseous Emissions

EPA Office of Air Quality Planning and Standards: Issues Relating to VOC Regulation Cutpoints, Deficiencies, and Deviations, May 25, 1988.

Engineering Science, Inc.: Final Report for Washington and Oregon VOC Program Evaluation, July 1988.

EPA Office of Air Quality Planning and Standards: Summary of Group I and Group II Control Technique Guideline Documents for Control of Volatile Organic Emissions from Existing Stationary Sources, December 1978 and 1979.

LAND USE CONSISTENCY STATEMENT

The Department has concluded that the proposed rule amendments do not appear to affect land use and will be consistent with Statewide Planning Goals and Guidelines.

With regard to Goal 6, (air, water, and land resources quality), the proposed changes are designed to enhance and preserve air quality in the state and are considered consistent with the goal. The proposed rule changes do not appear to conflict with the other goals.

Public comment on any land use issue involved is welcome and may be submitted in the same fashion as indicated for other testimony on these rules.

It is requested that local, state, and federal agencies review the proposed action and comment on possible conflicts with their programs affecting land use and with Statewide Planning Goals within their expertise and jurisdiction.

#### FISCAL AND ECONOMIC IMPACT STATEMENT

Sources affected by the Department's VOC rules are required to meet emission standards which are based on reasonably available control technology (RACT) and information contained in federal Control Technique Guidelines (CTG). Therefore, sources affected by these rules are already subject to the costs of control and compliance.

The proposed rule amendments to the VOC rules will eliminate or lower certain exemption points, requiring several smaller sources to apply RACT to achieve these VOC emission standards. The proposed amendments will also require RACT on a permanent basis for any source which exceeds any exemption point listed in a VOC rule. This means that a source would not be able to reinstall minimal (less than RACT) controls if emissions fall below the exemption point, and would always be subject to the control requirement of the regulation.

In the case of small surface coating operations (miscellaneous metal coaters), the lowering of the exemption point from 40 tons/year to 10 tons/year will require these sources to control VOC emissions by either process modifications or exhaust gas treatment.

The federal Control Technology Guidance (CTG) document for miscellaneous metal coating (EPA-450/2-78-015) provides a general cost analysis for a small size coating line (139,000 m<sup>2</sup>/yr, 1,500,000 ft<sup>2</sup>/yr), for a one-color, single or two-coat operation, using either flow, dip, or spray-coat applications. The estimated cost range reflects several different VOC control options (costs based on CTG 1977 dollars):

- o Capital Costs 12 - 761  
(\$1000)
- o Annualized Costs 5 - 206  
(\$1000)

o Cost Effectiveness	
(\$/Mg of solvent controlled)	294 - 13,733
(\$/ton)	267 - 12,458

In general, the cost estimates outlined in this CTG indicate that modification of the coating process to a low-solvent coating is more cost effective for control of VOCs than installing exhaust gas controls. However, given the wide range in estimated costs, the specific economic feasibility of applying this CTG to each individual source cannot be assessed by the Department. Costs associated with modification of the coating process to a low-solvent coating vary considerably based on coating material costs, process equipment requirements, dry coating thickness, coating transfer efficiency, raw material costs, and coating specifications. These parameters significantly affect control costs and the cost-effectiveness of different options, and therefore can only be determined by the individual source.

For the small surface coaters affected by these proposed rule amendments, the Department recognizes that there will be situations where current technology does not provide low-solvent coatings which can successfully replace conventional coatings for some specialty coatings now provided. If other process modifications or use of add-on technology for exhaust gas treatment cannot be applied to remedy these situations, some specific coating lines may have to be discontinued.

BRF:a  
 PLAN\AH10050  
 (6/90)

*Oregon Department of Environmental Quality*

# A CHANCE TO COMMENT ON...

## NOTICE OF PUBLIC HEARING FOR PROPOSED VOC RULES

Hearing Date: July 31, 1990  
Comments Due: August 3, 1990

- WHO IS AFFECTED:** Any source which emits air contaminants of Volatile Organic Compounds (VOC).
- WHAT IS PROPOSED:** The Department of Environmental Quality is proposing amendments to its General Emission Standards for Volatile Organic Compounds, OAR 340-22-100 through 340-22-300.
- WHAT ARE THE HIGHLIGHTS:** The Department's proposed rule amendments to its VOC rules will better assure attainment of the National Ambient Air Quality Standard for Ozone by incorporating the following changes consistent with federal guidelines: 1) lowering the exemption point for small surface coating operations; 2) changing monthly recordkeeping for small surface coaters to daily; 3) remove generic exemption for stencil coating operations, allowing an exemption only for railroad car stencil coating; 4) remove five other exemptions from the rules; 5) require RACT permanently for any source exceeding an applicable exemption point; and 6) add 19 rule definitions and revise 8 other definitions consistent with federal definitions.
- HOW TO COMMENT:** Copies of the complete proposed rule package may be obtained from Air Quality Division in Portland 811 S.W. Sixth Avenue or the regional office nearest you. For further information contact Brian Finneran at (503) 229-6278.
- A public hearing will be held before a hearings officer at:
- Oral and written comments will be accepted at the public hearing. Written comments may be sent to the DEQ, but must be received by no later than Friday, August 3, 1990.



811 S.W. 6th Avenue  
Portland, OR 97204

11/1/86

### FOR FURTHER INFORMATION:

Contact the person or division identified in the public notice by calling 229-5696 in the Portland area. To avoid long distance charges from other parts of the state, call 1-800-452-4011.

**WHAT IS THE  
NEXT STEP:**

After public hearing the Environmental Quality Commission may adopt rule amendments identical to the proposed amendments, adopt modified rule amendments on the same subject matter, or decline to act. The adopted rules will be submitted to the U. S. Environmental Protection Agency as part of the State Clean Air Act Implementation Plan. The Commission's deliberation should come in September 21, 1990, as part of the agenda of a regularly scheduled Commission meeting.

A Statement of Need, Fiscal and Economic Impact Statement, and Land Use Consistency Statement are attached to this notice.

BRF:a  
PLAN\AH10052  
(6/90)

MEMORANDUM

HEARINGS OFFICER'S REPORT

TO: Environmental Quality Commission  
FROM: Brian Finneran, Hearings Officer  
DATE: December 6, 1990  
SUBJECT: Public Hearings: July 31, 1990, Portland  
August 16, 1990, Portland

Adoption of Amendments to General Emission Standards  
for Volatile Organic Compounds (VOCs).

Background

On June 29, 1990, the Environmental Quality Commission authorized for public hearing these VOC rule amendments proposed by the Department. VOC is a major element in the formation of ozone in the urban areas of Oregon. Sources affected by these proposed rule amendments are located in the Portland area only.

The two hearings were held at the times and places indicated above. A total of 35 people attended the hearings, with eight persons providing verbal testimony. Seven others who did not attend the hearings provided written testimony during the public comment period, which ended August 16, 1990.

Testimony

Most of those providing testimony represented industries affected by the proposed changes. This testimony fell into three categories: 1) Representatives of small industrial surface coating operations; 2) Representative of a major sources previously not covered by these rules, but for whom new emission standards would be developed; and 3) Other representatives and interests.

1. Industrial Surface Coating Sources.

David Smukowski, Robin Bennett, Boeing Support Services,  
Seattle, WA.

Mr. Smukowski and Ms. Bennett provided testimony for Boeings' aerospace facility in Gresham. They indicated that the federal Control Technology Guideline (CTG) developed in 1978 for miscellaneous metal parts coatings does not adequately address the aerospace coatings, and that many states have developed specific rules for aerospace coatings rather than apply this CTC. They pointed out two legislative proposals currently in Congress that call for the development of a federal CTC for aerospace coatings. Since 1978 Boeing has conducted research and testing to develop low solvent compliance paints, but because of the extreme performance requirements associated with airplane safety, very few compliance paints have been found. Mr. Smukowski requested that the Department either 1) wait for the outcome in Congress and the 2 to 3 years for a federal CTC to be issued, 2) develop specific state rules for aerospace coatings, or 3) exempt this source, based on the facility's inability to use compliance technology to achieve the proposed VOC emission of 3.5 lb/gal.

Victor Scaricamazza, Extrusion Coatings, Morton International, Chicago, IL.

Mr. Scaricamazza's company manufactures premium high performance architectural spray coatings which meet the requirements of the American Architectural Manufacturers Association (AAMA), for architects, engineers, and commercial building owners. His company's position is that high performance architectural coatings for aluminum extrusions and panels must meet the performance requirements contained in AAMA specification 605.2, which calls for high resistance to extreme weather conditions. The coatings Morton International distributes emits 6.25 lbs VOC/gal, with each coating lasting 20-25 years. Therefore, the company opposes the replacement of the current limit of 6.2 lbs VOC/gal with a 3.5 lbs VOC/gal limit, as proposed in the new rules, and requests an exemption that will allow the higher emission limit. This firm also does not anticipate the development of any compliance paint in the near future.

Jim Ronsse, Aluminum Extrusions, PPG Industries, Inc., Torrance, CA.

PPG Industries also manufactures a premium high performance architectural coating similar to Morton International. Their coating must meet the same AAMA 605.2 specification for coating aluminum extrusions and panels. Mr. Ronsse indicated no low VOC coating can meet the AAMA 605.2 specification for performance. He stated current rules in Los Angeles, New York, and Michigan have exemptions for high performance

coatings. He pointed out that if low VOC coatings were used, they would have a life expectancy of only 5-10 years, rather than the 20-25 years PPG's coating provides. This would require more frequent repainting, effectively negating the net air quality benefit of using lower VOC coatings. PPG's position is to therefore exempt the current limit of 6.2 lbs VOC/gal from of the proposed 3.5 lbs VOC/gal limit.

Michael Davis, Lew Rink, Anodizing Inc., Portland, OR.

Mr. Davis indicated that his company is the largest producer of aluminum extrusions in the region, and recently completed construction of an aluminum extrusion coating facility at a cost of \$1.5 million. This facility contains a state-of-the-art paint line which utilizes electrostatic spraying at a high coating efficiency of 90-95 percent, and other current technology. Of the coatings applied to aluminum extrusions, 20% are for high performance architectural coating, which must meet AAMA 605.2 specifications. This coating contains 6.25 lbs VOC/gal. The remaining 80% of the coatings applied are to residential extrusions using high solid coatings, which can meet the 3.5 lbs VOC/gal limit. However, Mr. Davis pointed out that they must use whatever coating is specified by the customer, and often it is a high performance noncompliance or low solids coatings, even for residential extrusions. He supports exempting the 6.2 lbs VOC/gal limit for high performance architectural coating.

John Burns, Dura Industries, Inc., Portland, OR.

This company specializes in coatings for aluminum extrusions and odd-shaped panels that would be impractical for large paint lines. Mr. Burns indicated that 35% of his jobs require high performance architectural coating with a life expectancy of 25 years. This accounts for nearly half of his business revenue. The VOC content of these paints are at levels above the proposed 3.5 lbs/gal. His facility recently purchased electrostatic and HVLP paint guns in order to improve paint transfer efficiency - a federally recognized method of lowering VOC emissions. Other emission controls such as carbon absorption and incineration are not economically feasible. Mr. Burns' position is 1) current federal control guidelines do not adequately address high performance architectural coatings, and that the Department should wait until EPA develops such guidelines, which he indicated could be as soon as two years, before changing the current rules; and 2) in lieu of an across-the-board limit for high performance architectural coatings, grant a variance on a job-by-job basis in cases where no compliance coatings (3.5 lbs VOC/gal) are available. Mr. Burns also opposed the



proposed daily recordkeeping requirement because of the difficulty of tracking many small paint applications used on a variety of odd paint jobs. He indicated that daily monitoring would require a new full-time employee which would be expensive, and therefore favors being allowed to continue the monthly recording (by inventorying purchasing records) as currently practiced.

Ken Hauser, Quali-Cote Inc., Tigard, OR.

This company provides custom coatings for electronic, automotive, and medical equipment. About 40% of their business is plastic coating, much of which is metalization coating on plastic, which require using non-conforming coatings over 6 lbs VOC/gal. Mr Hauser indicated that his customers select the coatings they want, therefore his company has no control over this, even if they wanted to use compliance coatings. He emphasized that the proposed lowering of the exemption point from 40 tons/year VOC to 10 tons/year puts his company at an economic disadvantage, as he estimates there are as many as 18 competing companies under the 10 tons/year cutoff which will continue to be exempt, and could take over nearly all of his customers. His position is that the 10 ton/year cutoff should be eliminated so that all VOC sources are subject to the same rule requirements. He added that the proposed daily recording requirement is not feasible, since there are often up to 40 color changes a day, making only rough estimates possible. He favors continuing monthly recording via inventorying purchasing records.

Earl Geissler, Wagner Mining Equipment Co., Portland, OR.

This company applies coatings to equipment and machines used in mining operations. Mr. Geissler indicates that compliance paints are available, but that their performance is not adequate. He estimates that purchasing necessary equipment to retrofit his facility for use of water-based paints would cost up to \$700,000. He is willing to retrofit with installation of electrostatic paint guns, and to use high solids paints - both federally approved methods - but at a much lower cost. He claims this will cut his VOC emissions in half, but will not put him below the 10 ton/year cutoff. For this reason he is requesting an exemption from the 10 ton/year cutoff.

Larry Moomaw, Moomaw Miller & Reel, Attorneys at Law,  
Beaverton, OR

Mr. Moomaw provided written testimony on behalf of Dura Industries and Quali-Cote, Inc., whose testimony is summarized above. He reiterated their concerns of their need for an exemption to the 6.2 lbs VOC/gal emission limit due to the unavailability of compliance coatings. He provided the following recommendations to the Department: (1) DEQ should specify the actual emission reductions that will occur as a result of the proposed rules, and if this cannot be done, reconsider adopting the proposed rule changes; (2) DEQ should identify every small industrial source which emits VOCs; (3) DEQ should identify all surface coating operations which may be financially unable to comply with the proposed rules; (4) sources such as Quali-Cote and Dura Industries which provide specialized coatings should be exempted from the proposed rules; and (5) surface coating operations unable to meet the daily recordkeeping requirement should be exempted.

2. Major Sources Not Previously Covered by federal CTGs.

Theresa Parrone, Tektronix Inc., Beaverton, OR

Ms. Parrone pointed out in her written testimony many rule definitions and several rule requirements which were unclear and needed to be corrected. She indicated that the daily recordkeeping requirement would be a burden for small surface coating operations, and that the Department should change the term "potential to emit" from uncontrolled or worst-case emissions to actual emissions. She also pointed out that the new provision for limiting solvent evaporation for degreasing operations needed to be changed to allow waste solvent to be recycled, and that the rules did not indicate an effective date the changes would go into effect.

3. Other Representatives and Interests.

Bill Felker, Mt. Hood Oil Co., Gresham, OR.

Mr. Felker operates a wholesale bulk gasoline plant which delivers gasoline to small service stations in the Portland area. Mr. Felker pointed out that his customers are exempt from the vapor recovery requirement in the Departments' current Small Gasoline Storage rules, since they dispense less than 10,000 gal/month. However, he maintains that his bulk plant should be exempt from vapor recovery since his delivery trucks deliver to service stations which do not capture the vapors during the unloading of gasoline. His position is that the proposed rules should retain this exemption for bulk plants which deliver to exempt service stations, since there are no vapors being returned to the bulk plant.

Thomas C. Donaca, Associated Oregon Industries, Salem, OR.

Mr. Donaca indicated in his testimony that the proposed rule change lowering the exemption point for small surface coating operations from 40 to 10 tons per year will result in a significant workload increase for the Department, in part due to the many sources that may be included under "potential to emit before controls" provision for 10 ton sources. He stated that is unclear how the Department would determine RACT for sources not covered by federal CTGs, and that as a result this determination process would be slow. He also pointed out several rule provisions which needed clarification.

Stephen R. Brown, Stoel Rives Boley Jones & Grey, Attorneys at Law, Portland, OR

Mr. Brown raised concerns over numerous rule definitions and requirements contained in the proposed rule amendments. Included in his written testimony were the following points: (1) the definition of RACT is unclear as to how technical and economic feasibility would be weighed by the Department; (2) since the costs associated with applying RACT to major sources not covered by federal CTGs are unknown, it is likely they will be high; (3) it is unclear how RACT for these major sources will be developed and implemented; (4) the Department should exempt these sources from RACT if the source can demonstrate its emissions have fallen below 100 tons; (5) the Department needs to clarify whether RACT would be applied to an entire facility or only to an individual emission unit; and (6) recommend that the Department through rulemaking develop RACT standards for source categories not covered by federal CTGs, rather than on a case-by-case basis for sources.

David Paul, Northwest Environmental Defense Center, Portland, OR

Mr. Paul expressed his support for the proposed rule amendments, in particular the provision lowering the exemption point for small surface coating operations from 40 to 10 tons per year, citing the need for the Department's rules to be consistent with federal requirements. He indicated that this would help reduce toxic emissions associated with the reduction in VOC emissions from these sources. He stated his concern that Portland continues to be an ozone nonattainment area, and that further revisions to other DEQ rules are necessary to bring these rules into compliance with federal requirements. His written testimony

made reference to a Notice of Intent to file suit against DEQ by the Sierra Club Legal Defense Fund, of which these amendments to the VOC rules are cited.

A list of the persons providing testimony is provided below. The list includes the name, affiliation, submittal of written testimony, and primary position on the proposed rules as indicated on the witness registration form or by testimony.

VOC RULE PUBLIC TESTIMONY

<u>TESTIMONY</u> <sup>1</sup>	<u>NAME</u>	<u>AFFILIATION</u>	<u>GENERAL POSITION</u> <sup>2</sup>
1. B	David Smukowski	The Boeing Co.	O
2. B	Victor Scaricamazza	Morton International	O
3. B	James V. Ronsse	PPG Industries, Inc.	O
4. B	Bill Felker	Mt. Hood Oil Co.	O
5. B	Michael Davis	Anodizing Inc.	O
6. B	John Burns	Dura Industries, Inc.	O
7. V	Ken Hauser	Quali-Cote Inc.	O
8. W	Earl Geissler	Wagner Mining Equipment Co.	O
9. W	Thomas C. Donaca	Associated Oregon Industries	O
10. W	Theresa Parrone	Tektronix Inc.	O
11. W	Larry Moomaw	Moomaw Miller & Reel	O
12. W	Stephen Brown	Stoel Rives Boley Jones & Grey	O
13. W	David Paul	Northwest Environmental Defense	S

<sup>1</sup> Testimony      V = verbal  
                    W = written  
                    B = both verbal and written

<sup>2</sup> Primary Position      S = Support  
                            O = Opposed  
                            N = Neutral

REQUEST FOR EQC ACTION

Meeting Date: April 26, 1991  
Agenda Item: I  
Division: Air Quality  
Section: Planning & Development

**SUBJECT:**

Proposed Rule Adoption: Stage II Vapor Recovery to Control Refueling Vapors at Gasoline Stations in the Portland Area.

**PURPOSE:**

To require, over a three-year period, the installation of Stage II vapor recovery equipment at all gasoline service stations with more than 600,000 gallons of annual gasoline throughput in Clackamas, Multnomah and Washington Counties. This action will help attain and maintain compliance with ozone air quality standards while accommodating growth and development.

**ACTION REQUESTED:**

- Authorize Rulemaking Hearing  
 Adopt Rules

Proposed Rules  
Rulemaking Statements  
Fiscal and Economic Impact Statement  
Public Notice

Attachment A  
Attachment B  
Attachment C  
Attachment D

**DESCRIPTION OF REQUESTED ACTION:**

This report requests adoption of rules that would require Stage II vapor recovery (control of motor vehicle refueling vapors) at gasoline stations. Stage II vapor recovery systems collect gasoline vapors at the vehicle fuelpipe opening using a special nozzle and coaxial hose designed to return the vapors to the underground storage tank.



811 SW Sixth Avenue  
Portland, OR 97204-1390  
(503) 229-5696



The Department of Environmental Quality (DEQ, Department) proposed these rules based on five guiding principles endorsed by the Environmental Quality Commission (EQC, Commission) at the September 20, 1990, EQC Work Session:

1. The three Portland-area counties should be addressed first since they are within the ozone nonattainment area and subject to airshed barriers to growth and development (with other areas considered later after further evaluation);
2. The exemption cutpoints and schedules should affect a substantial portion of the regional gasoline throughput during the first and second years of the Stage II program in order to provide airshed room for growth and development;
3. The exemption cutpoints and schedules should affect larger stations first and smaller stations later;
4. The exemption cutpoints and schedules should affect a relatively constant number of stations each year to ensure orderly implementation within the ability of qualified contractors; and
5. Stage II implementation in the Portland area should be essentially completed by the end of 1993 (deadline in 1990 Clean Air Act for marginal ozone nonattainment areas) to ensure ozone compliance and accommodate potentially explosive growth of population, traffic and businesses.

The proposed rules would require the installation of Stage II vapor recovery equipment over the next one to three years, depending on the gasoline throughput volume of the station, or at the time of underground storage tank (UST) compliance work, whichever occurs sooner. Larger stations would be affected first and smaller stations later within the three-year period.

The proposal would ultimately affect gasoline stations with an annual gasoline throughput of 600,000 gallons or more (i.e., monthly average throughput of 50,000 gallons or more) in Clackamas, Multnomah and Washington Counties. A recent survey indicates that about 60% of the gasoline stations (about 300 stations) and about 90% of the total gasoline throughput in the three counties would be affected.

Stage II vapor recovery is projected to reduce hydrocarbon emissions by about 3000 tons per year or 6% of the total hydrocarbon emissions in the Portland airshed. Stage II vapor recovery will help ensure that the ozone standard is

Meeting Date: April 26, 1991  
Agenda Item: I  
Page 3

attained by the November 1993 Clean Air Act deadline and maintained in future years.

In addition, gasoline stations in the fringe areas of these counties that have not already installed Stage I vapor recovery systems (control of vapors from tanker truck to service station storage tank) would be required to do so within the same schedule; gasoline stations within the Portland-Vancouver Air Quality Maintenance Area (which includes most of the stations in the urbanized areas of the three counties) have already installed Stage I (by April 1981 as required by earlier rules).

AUTHORITY/NEED FOR ACTION:

<input type="checkbox"/> Required by Statute: _____	Attachment _____
Enactment Date: _____	
<input checked="" type="checkbox"/> Statutory Authority: <u>ORS 468.295</u>	Attachment <u>E</u>
<input type="checkbox"/> Pursuant to Rule: _____	Attachment _____
<input type="checkbox"/> Pursuant to Federal Law/Rule: _____	Attachment _____

Time Constraints:

Most of the UST compliance work will be completed in the next few years. By requiring Stage II vapor recovery at the same time as UST compliance work, it is expected that the overall cost of the two actions will be reduced for many gasoline stations.

The Portland-Vancouver area continues to violate the air quality health standards for ozone and is classified as a marginal nonattainment area. Timely implementation of Stage II vapor recovery is one of the most cost-effective pollution control actions available to address this problem. The 1990 Clean Air Act requires marginal ozone nonattainment areas to meet the ozone standard by November 1993.

DEVELOPMENTAL BACKGROUND:

<input checked="" type="checkbox"/> Advisory Committee Report/Recommendation (Incorporated within 09/20/90 EQC Work Session report)	Attachment <u>F</u>
<input checked="" type="checkbox"/> Hearing Officer's Report/Recommendations	Attachment <u>G</u>
<input checked="" type="checkbox"/> Prior EQC Agenda Items:	

11/30/89 EQC Work Session	
01/18/90 EQC Work Session	
05/25/90 EQC Hearing Authorization	
09/20/90 EQC Work Session	
12/14/90 EQC Hearing Authorization	Attachment <u>H</u>

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

The Stage II Technical Advisory Committee, made up of both industry and environmental representatives, was divided between two implementation alternatives (see Attachment F). The Stage II proposal that was taken to public hearing was a compromise between the two alternatives. The revised proposal as now recommended by the Department for adoption, discussed later, is still a compromise between these two alternatives but is more similar to the proposal recommended by the industry representatives.

The affected gasoline station owners and organizations have expressed concerns about the costs and schedules for implementing Stage II vapor recovery:

1. The major cost-related concern has been that the gasoline station industry is already incurring substantial costs from UST compliance work and, although Stage II costs are typically much lower than UST compliance costs, the Stage II costs are an additional financial burden for the industry.
2. The major schedule-related concerns have been that the three-year schedule conflicts with the availability of equipment and qualified contractors and the ability of station owners to budget funds.

Regarding costs, Stage II is the most significant and cost-effective air pollution control measure available to the state to further reduce ozone levels. The proposed rules would require both the underground piping and the above-ground equipment for Stage II vapor recovery systems. The total capital cost is estimated to be \$10,000 to \$28,000 for a typical 12-nozzle station. The cost would generally be in the lower part of this range if the underground piping was coordinated with UST compliance work.

A recent survey by the Department indicates that almost 40% of the gasoline stations in the three-county area have an annual gasoline throughput of less than 600,000 gallons and would be exempt from the proposed Stage II requirements; these stations account for about 10% of the total gasoline throughput in the area.

Financial assistance is available from the state to partially defray these costs through pollution control tax credits and Underground Storage Tank loan guarantees and interest rate subsidies. The 1991 Oregon Legislature is considering expanded financial assistance in the form of 50-85% grants for gasoline station owners with financial need.



Meeting Date: April 26, 1991  
Agenda Item: I  
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The overall costs for Stage II are estimated to be in the range of \$600 to \$2000 per ton of hydrocarbon vapor reduction based on 10% interest rate and 15-year equipment life. Stage II vapor recovery is therefore a much more cost-effective strategy for reducing ozone pollution than new controls on industrial sources (estimated \$5,300 to \$6,600 per ton hydrocarbon reduction). Additional cost information is included in the Fiscal and Economic Impact Statement (Attachment C).

Regarding schedules, the proposed three-year schedule is consistent with the 1990 Clean Air Act requirement that marginal ozone nonattainment areas meet the ozone health standard by November 1993. Stage II is not automatically required by the Clean Air Act of 1990 for marginal ozone nonattainment areas such as the Portland area; therefore the state has flexibility to use Stage II emission reductions for growth cushion as needs arise, as well as for attainment and maintenance of ozone standards. The portion of the emission reduction available, if any, for growth cushion will be identified as the ozone maintenance plan is developed over the next couple of years.

The Department contacted qualified contractors in order to assess the impact of Stage II vapor recovery requirements on their workload. Stage II on gasoline stations in the Portland area would represent a minor portion (estimated 8-12%) of their total workload on underground storage tanks (total workload for all tanks, not just gasoline stations) over the next three years. The contractors indicated that it was feasible to increase their work force by 50-100% over a two-year period if necessary to handle an increased work load.

The Department also contacted equipment suppliers in the Portland area. They did not expect equipment availability problems with the proposed three-year implementation schedule.

Other states such as Connecticut, Massachusetts, Missouri, and New York have already implemented or are in the process of implementing Stage II on a two to three year schedule for stations with similar gasoline throughputs to the Portland-area proposal.

#### PROGRAM CONSIDERATIONS:

Costs to the Department would fall into five categories:

- o Registration of equipment to be regulated;
- o Review and/or inspection of installation;
- o Education of the regulated community;

- o Periodic inspection and/or performance testing;
- o Enforcement and follow up inspections.

A stand-alone Stage II Vapor Recovery program operated independently by the Air Quality Division in the Portland metropolitan area would require 2 full-time-equivalent (FTE) positions and an annual budget of \$125,000. One FTE would be needed the first year and two FTE in the second and subsequent years. Substantial cost savings are possible (as much as 50%) if a cooperative approach is taken with existing programs in the Department of Agriculture Weights & Measures Division (which already inspects metering systems on all retail gasoline pumps), DEQ Underground Storage Tank Program (which already regulates underground gasoline tank installations), and DEQ Regional Operations (which already does inspections and enforcement on many pollution sources).

The U.S. Environmental Protection Agency (EPA) has agreed to provide the funding for initial training of installers and inspectors. Existing state and federal funding is available for startup of the Stage II program (one FTE for the first year). The Department is working with the other involved parties to determine the appropriate funding mechanism (federal base grant increase, permit fees, or re-prioritization of existing resources) for the ongoing compliance program.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

The first alternative listed below was the proposal taken to public hearing on February 20, 1991. The other four alternatives were proposed during the public hearing process based on cost and schedule concerns summarized above under REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS.

First Alternative

<u>Throughput</u>	<u>Date</u>	<u>Boundaries</u>
150,000 gal/mo	12/31/91	Multnomah, Washington and Clackamas Counties
90,000 gal/mo	12/31/92	" " "
50,000 gal/mo	12/31/93	" " "

Second Alternative

Expand Stage II boundaries to include Lane County (Eugene-Springfield) and Jackson County (Medford-Ashland), or Willamette Valley, or western Oregon, or statewide, but on possibly longer schedule in the additional areas.

Third Alternative

All gasoline marketers with three or fewer service station sites would be exempt from Stage II vapor recovery implementation regulation until such time as each of those sites is upgraded to comply with the underground storage tank (UST) regulations.

If the station is already in compliance with UST, and has the underground piping in place for Stage II, compliance would go into effect as proposed under the first alternative.

If USTs have already been upgraded and are in compliance with the UST regulation, but do not have underground piping for Stage II in place, than those marketers should be given three years to install Stage II vapor recovery equipment.

Fourth Alternative

Extend each of the schedules in the first alternative by four to twelve months.

Fifth Alternative

Owners of five or more stations must install Stage II on one-third of their stations by 4/30/92.

Owners of five or more stations must install Stage II on two-thirds of their stations by 8/31/93.

All station not otherwise exempt from Stage II requirements must install Stage II by 12/31/94.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

The Department recommends the fourth alternative with a four-month extension to each of the schedules that were taken to public hearing as follows:

<u>Throughput</u>	<u>Date</u>	<u>Boundaries</u>
150,000 gal/mo	4/30/92	Multnomah, Washington and Clackamas Counties
90,000 gal/mo	4/30/93	" " "
50,000 gal/mo	4/30/94	" " "

In addition, the Department intends to evaluate larger boundaries for Stage I and Stage II vapor recovery in the future as part of the development of a statewide air toxics

strategy as directed by the Commission on September 20, 1990.

The Department believes that this approach is the best balance between: (a) responsiveness to the concerns raised during the public hearing; and (b) consistency with the five guiding principles for the Stage II control program (listed earlier under DESCRIPTION OF REQUESTED ACTION) endorsed by the Commission at the September 20, 1990, EQC Work Session.

Since the critical ozone season in Oregon is from May through September, the four-month schedule extension from December 31 to April 30 will still provide complete Stage II vapor recovery prior to the first ozone season (May-September 1994) following the Clean Air Act attainment date (November 1993). The four-month extension will provide more time to complete the work and allow businesses to shift some expenses into a subsequent budget year.

The third and fifth alternatives conflict with one or more of the five guiding principles. Both would extend the completion of Stage II work beyond the three-year schedule allowed to meet the ozone health standard (Guiding Principle 5). As summarized under REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS, the Department believes a three-year implementation schedule is necessary and reasonable.

The third and fifth alternatives could also be in conflict with completing Stage II work on the largest stations first and smaller stations later (Guiding Principle 3), since the criteria would be shifted to the number of stations under common ownership rather than the gasoline throughput; the owner would not be required to focus on the largest stations first. The third and fifth alternatives would also tend to shift more of the Stage II work to the third, fourth or later years which would conflict with Guiding Principles 2 and 4.

In response to comments, the Department has made several additional revisions to the rules for clarification purposes.

**CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:**

The proposed rules are consistent with Goals 3 and 8 of the Strategic Plan:

3. Ensure that unallocated assimilative capacity exists by applying "highest and best" technology in conjunction with pollution prevention methods.

Meeting Date: April 26, 1991  
Agenda Item: I  
Page 9

8. Streamline agency programs and activities by identifying and implementing more efficient ways to accomplish essential actions and by eliminating low priority tasks.

The Department is not aware of any conflicts with agency or legislative policy.

ISSUES FOR COMMISSION TO RESOLVE:

Does the Commission favor a Stage II alternative that would extend beyond the three-year implementation schedule (Clean Air Act deadline for ozone attainment) in order to allow gasoline station owners maximum flexibility for coordination with their schedules for UST compliance work?

INTENDED FOLLOWUP ACTIONS:

1. Coordinate Stage II program with DEQ Underground Storage Tank program and Department of Agriculture, Weights and Measures Division, and DEQ Regional Operations; and determine the funding mechanism for the ongoing compliance program.
2. Evaluate other areas of Oregon for implementation of Stage II vapor recovery as part of an air toxics control strategy, and report back to the Commission in early 1992.
3. Project ozone-precursor emission inventories for future years, identify portion of Stage II emission reduction available for growth cushion, and develop ozone maintenance plan within two years with the assistance of the Metropolitan Service District.

Approved:

Section:

Division:

Director:

*John F. Kowaluk*  
*She Greenwood*  
*Jed Heman*

Report Prepared By: Merlyn Hough  
Phone: 229-6446  
Date Prepared: April 9, 1991

MLH:a  
PLAN\AH12\AH12361  
(4/9/91)

## Gasoline Vapors from Gasoline Transfer and Dispensing Operations

### Purpose

340-22-400 (1) Gasoline vapors contribute to the formation of ozone. These rules require the control of gasoline vapors from gasoline transfer and dispensing operations.

(2) These rules apply to gasoline dispensing sites located within Clackamas, Multnomah and Washington Counties.

### Definitions

340-22-402 As used in these rules, unless otherwise required by context: (1) "Equivalent control" means the use of alternate operational and/or equipment controls for the reduction of gasoline vapor emissions, that have been approved by the Department, such that the aggregate emissions of gasoline vapor from the facility do not exceed those from the application of defined reasonably available control technology.

(2) "Gasoline" means any petroleum distillate having a Reid vapor pressure of four pounds per square inch (28 kilopascals) or higher, used as a motor fuel.

(3) "Gasoline dispensing site" means any site where gasoline is dispensed into vehicle fuel tanks or into portable containers used to fuel any motor from any stationary storage container(s) larger than 550 gallons.

(4) "Annual throughput" means the amount of gasoline transferred into or dispensed from a gasoline dispensing site during 12 consecutive months.

(5) "Stage I vapor collection system" means a system where gasoline vapors are forced from a tank into a vapor-tight holding system or vapor control system through direct displacement by the gasoline being loaded.

(6) "Stage II vapor collection system" means a system where at least 90 percent, by weight, of the gasoline vapors that are displaced or drawn from a vehicle fuel tank during refueling are transferred to a vapor-tight holding system or vapor control system.

(7) "Substantially modified" means a modification of an existing gasoline-dispensing site which involves the addition of one or more new stationary gasoline storage tanks or the repair, replacement or reconditioning of an existing tank.

(8) "Vapor control system" means a system that prevents emissions to the outdoor atmosphere from exceeding 4.7 grains per gallon (80 grams per 1,000 liters) of petroleum liquid loaded.

### General Provisions

340-22-404 (1) No person shall transfer or allow the transfer of gasoline into storage tanks, at gasoline-dispensing sites located in Clackamas, Multnomah or Washington Counties, whose annual throughput exceeds 120,000 gallons, unless the storage tank is equipped with:

(a) a stage I vapor collection system consisting of a vapor-tight return line from the storage tank, or its vent, to the gasoline transport vehicle;

(b) a properly installed onsite vapor control system connected to a vapor collection system; or

(c) an equivalent control system.

(2) A stage I vapor collection system and submerged filling are not required for storage tanks with a capacity less than 550 gallons. A stage II vapor collection system is not required at gasoline-dispensing sites that are not subject to the stage I requirements of this section.

(3) No owner and/or operator of a gasoline-dispensing site shall transfer or allow the transfer of gasoline into a motor vehicle fuel tank at gasoline-dispensing sites located in Clackamas, Multnomah or Washington Counties whose annual throughput exceeds 600,000 gallons, unless the gasoline-dispensing site is equipped with a stage II vapor collection system which must be approved by the Department before it is installed.

**Note:** Underground piping requirements are described in OAR 340-150-001 through -003, and 40 CFR 280.20 (d). Systems installed according to American Petroleum Institute Publication 1615, "Installation of Underground Petroleum Storage System" or Petroleum Equipment Institute Publication RP100, "Recommended Practices for Installation of Underground Liquid Storage Systems" or American National Standards Institute Standard B31.4 "Liquid Petroleum Transportation Piping System" are considered approved systems.

Above-ground stage II equipment requirements are based on systems recently approved in other states with established stage II programs. See the Oregon Department of Environmental Quality, Air Quality Division, for the list of approved equipment. Any other proposed equivalent systems must be submitted to the Department of Environmental Quality, Air Quality Division, for approval before installation.

(4) Owners and/or operators of gasoline storage tanks, gasoline transport vehicles and gasoline-dispensing sites subject to stage I or stage II vapor collection requirements must:

(a) install all necessary stage I and stage II vapor collection and control systems, and make any modifications necessary to comply with the requirements;

(b) provide adequate training and written instructions to the operator of the affected gasoline-dispensing site and the gasoline transport vehicle;

(c) replace, repair or modify any worn or ineffective component or design element to ensure the vapor-tight integrity and efficiency of the stage I and stage II vapor collection systems; and

(d) connect and ensure proper operation of the stage I and stage II vapor collection systems whenever gasoline is being loaded, unloaded or dispensed.

(5) Approval of a stage I or stage II vapor collection system by the Department does not relieve the owner and/or operator of the responsibility to comply with other applicable codes and regulations pertaining to fire prevention, weights and measures and safety matters.

(6) Regarding installation and testing of piping for stage I and stage II vapor collection systems:

(a) Piping shall be installed in accordance with standards in OAR 340 Division 150;

(b) Piping shall be installed by a licensed installation service provider pursuant to OAR 340 Division 160; and

(c) Piping shall be tested prior to being placed into operation by an installation or tank tightness testing service provider licensed pursuant to OAR 340 Division 160.

Note: Test methods are based on methods used in other states with established stage II programs. See the Oregon Department of Environmental Quality, Air Quality Division, for copies of the approved test methods.

#### Compliance Schedules

340-22-406 (1) Owners of gasoline-dispensing sites subject to the stage I vapor collection requirements of this rule within the Portland Air Quality Maintenance Area are required to be in compliance with all stage I requirements by April 1, 1981.

(2) Owners of gasoline-dispensing sites subject to the stage I vapor collection requirements of this rule outside the Portland Air Quality Maintenance Area but within Clackamas, Multnomah or Washington Counties must be in compliance with stage I vapor collection requirements by December 31, 1993, or at the time the gasoline-dispensing site is required to install a stage II vapor collection system, whichever is sooner.

(3) Owners of gasoline-dispensing sites subject to the stage II vapor collection requirements of this rule must be in compliance with stage II vapor collection requirements:

(a) for gasoline-dispensing sites whose annual throughput exceeds 1,800,000 gallons, by no later than ~~December 31, 1991~~ April 30, 1992;

(b) for gasoline-dispensing sites whose annual throughput exceeds 1,080,000 gallons, by no later than ~~December 31, 1992~~ April 30, 1993;

(c) for gasoline-dispensing sites whose annual throughput exceeds 600,000 gallons, by no later than ~~December 31, 1993~~ April 30, 1994; or

(d) at the time the gasoline-dispensing site is substantially modified after the effective date of this rule; whichever is sooner.

MLH:a  
PLAN\AH11279



**RULEMAKING STATEMENTS FOR PROPOSED AMENDMENTS TO RULES  
FOR CONTROL OF GASOLINE VAPORS FROM GASOLINE DISPENSING STATIONS**

STATEMENT OF NEED FOR RULEMAKING

Pursuant to ORS 183.335(7), this statement provides information on the intended action to amend a rule.

(1) Legal Authority

This proposal amends Oregon Administrative Rules (OAR) 340, Division 22. It is proposed under authority of Oregon Revised Statutes (ORS) Chapter 468.

(2) Need for these Rules

Gasoline vapors contribute to ozone air pollution. The Portland-Vancouver Air Quality Maintenance Area continues to violate the ozone health standard (1988-90 ozone data). Additional reductions are needed in the hydrocarbon vapors (gasoline vapors and other hydrocarbon vapors) that contribute to ozone air pollution in order to prevent future violations of air quality standards and to provide airshed capacity for growth. The control of gasoline vapors at gasoline dispensing sites is one of the most cost-effective approaches for reducing ozone-causing emissions.

(3) Principal Documents Relied Upon

Evaluation of Air Pollution Regulatory Strategies for Gasoline Marketing Industry, U.S. Environmental Protection Agency, EPA-450/3-84-012a, July 1984.

Report to the Oregon Environmental Quality Commission by the Technical Advisory Committee on Stage I/II Vapor Recovery, November 8, 1989.

Staff Report to the Environmental Quality Commission, November 30, 1989, Work Session, Agenda Item No. 1.

Staff Report to the Environmental Quality Commission, January 18, 1990, Work Session, Agenda Item No. 2.

Staff Report to the Environmental Quality Commission, May 25, 1990, EQC Meeting, Agenda Item No. A-3(a).

Staff Report to the Environmental Quality Commission, September 20, 1990, Work Session.

All documents referenced may be inspected at the Department of Environmental Quality, 811 SW 6th Avenue, Portland, Oregon, during normal business hours.

LAND USE CONSISTENCY STATEMENT

The proposed rule changes appear to affect land use as defined in the Department's coordination program with DLCD, but appear to be consistent with the Statewide Planning Goals.

With regard to Goal 6, (air, water, and land resources quality), the proposed changes are designed to enhance and preserve air quality in the State and are considered consistent with the goal. The proposed rule changes do not appear to conflict with the other Goals.

Public comment on any land use issue involved is welcome and may be submitted in the same fashion as indicated for other testimony on these rules.

It is requested that local, state, and federal agencies review the proposed action and comment on possible conflicts with their programs affecting land use and with Statewide Planning Goals within their expertise and jurisdiction.

The Department of Environmental Quality intends to ask the Department of Land Conservation and Development to mediate any appropriate conflicts brought to our attention by local, state, or federal authorities.

MLH:a  
PLAN\AH11280

**FISCAL AND ECONOMIC IMPACT STATEMENT  
FOR PROPOSED AMENDMENTS TO RULES FOR CONTROL OF GASOLINE VAPORS  
FROM GASOLINE DISPENSING STATIONS**

PROPOSAL SUMMARY

The proposed rules would:

- o Require Stage II vapor recovery (control of motor vehicle refueling vapors) at gasoline stations.
- o Require the installation of Stage II vapor collection systems by no later than December 31, 1993 (earlier for larger volume stations) or at the time of compliance with Underground Storage Tank requirements, whichever occurs sooner.
- o Affect gasoline stations with an annual gasoline throughput of 600,000 gallons or more (i.e., monthly average throughput of 50,000 gallons or more) in Clackamas, Multnomah and Washington Counties.

In addition, gasoline stations with an annual gasoline throughput of 120,000 gallons or more in these counties that have not already installed Stage I vapor recovery systems (control of tanker truck to storage tank vapors) would be required to do so within the same schedule; gasoline stations within the Portland-Vancouver Air Quality Maintenance Area (which includes most of the stations in the three counties) were previously required to implement Stage I by April 1981.

COSTS TO GASOLINE STATION OWNERS

The proposed rules would require both the underground piping and the above-ground equipment for Stage II vapor recovery systems. The underground piping cost would be substantially lower if done at the time of Underground Storage Tank compliance work than if done separately.

The capital costs for the underground piping at a typical 12-nozzle gasoline station are estimated to be as low as \$2,000 for straightforward piping installations coordinated with UST compliance work, or as high as \$18,000 or more for more difficult piping installations not coordinated with UST compliance work. The capital costs for the above-ground equipment are about \$700 to \$800 per nozzle, or \$8,000 to \$10,000 per 12-nozzle gasoline station. Therefore, the total capital cost is estimated to be \$10,000 to \$28,000 for a typical 12-nozzle station.

The capital costs are expected to be in the lower part of this range if the underground piping is installed at the time of underground tank replacement. Financial assistance is available from the state to partially defray these costs through pollution control tax credits and Underground Storage Tank loan guarantees and interest rate subsidies.

The overall costs for Stage II are estimated to be in the range of \$600 to \$2000 per ton of hydrocarbon vapor reduction based on 10% interest rate and 15-year equipment life. These costs are less expensive than new controls on industrial sources (estimated \$5,300 to \$6,600 per ton reduction).

The capital costs for Stage I vapor control systems are estimated at \$300 to \$700 per underground storage tank or \$1000 to \$2000 per gasoline station. Gasoline stations within the Portland-Vancouver Air Quality Maintenance Area (AQMA) were required to install Stage I by April 1981. The proposed rules would require Stage I for gasoline stations outside the AQMA but within the three-county area.

These Stage I costs (\$1000 to \$2000 per typical station) and Stage II costs (\$10,000 to \$28,000 per typical station) compare to an estimated \$100,000 to \$180,000 to replace underground storage tanks at a three or four tank station.

New gasoline stations are usually designed for high throughput and frequently have 28 nozzles, four tanks, about 3/4 acre of land, and cost about \$1 million. The additional cost of Stage I and II vapor recovery equipment on such a new station at the time of construction is estimated at \$23,000 to \$27,000, or 2-3% of the total capital cost of the new station.

#### COSTS TO THE DEPARTMENT OF ENVIRONMENTAL QUALITY

Costs to the Department would fall into five categories:

- o Registration of equipment to be regulated;
- o Review and/or inspection of installation;
- o Education of the regulated community;
- o Periodic inspection and/or performance testing;
- o Enforcement and follow up inspections.

A stand-alone Stage II Vapor Recovery program operated independently by the Air Quality Division in the Portland metropolitan area would require 2 full-time-equivalent (FTE) positions and an annual budget of \$125,000.

Substantial cost savings are possible (as much as 50%) if a cooperative approach is taken. This approach would make use of existing programs in the Department of Agriculture Weights & Measures Division (which already inspects metering systems on all retail gasoline pumps), DEQ Underground Storage Tank Program (which already regulates and inspects some underground gasoline

tank installations), and DEQ Regional Operations (which already does inspections and enforcement on many pollution sources). It is expected that the incremental costs associated with an increased work load on these programs would be substantially less than the cost of creating a new program from scratch. The Department intends to pursue the cooperative approach and negotiate the necessary agreements.

Start-up costs could be minimized by phasing in the program over a few years. A program could be started almost immediately by requiring that underground Stage II equipment be installed whenever new tanks are installed (administered by the Underground Storage Tank program). Routine inspection of Stage II equipment would not be required until the time of installation of above-ground Stage II equipment.

The U.S. Environmental Protection Agency (EPA) has agreed to provide the funding for initial training of installers and inspectors. The Department will work with the other involved parties to determine the appropriate funding mechanism (federal funds or permit fees) for the ongoing compliance program.

MLH:a  
PLAN\AH11278  
(11/27/90)

*Oregon Department of Environmental Quality*

# **A CHANCE TO COMMENT ON...**

**CONTROL OF VAPORS FROM GASOLINE DISPENSING STATIONS  
NOTICE OF PUBLIC HEARING**

Hearing Date: February 20, 1991  
Comments Due: February 25, 1991

- WHO IS AFFECTED:** Gasoline dispensing stations in Clackamas, Multnomah and Washington Counties.
- WHAT IS PROPOSED:** The Department of Environmental Quality is proposing to amend OAR 340, Division 22.
- WHAT ARE THE HIGHLIGHTS:**
- 1) Gasoline vapors contribute to the formation of ozone air pollution. The proposed rules address the control of gasoline vapors at gasoline dispensing stations.
  - 2) Gasoline station owners would be required to install Stage I vapor recovery systems (if they have not already done so) and Stage II vapor recovery systems.
  - 3) The vapor control changes would need to be done by no later than December 31, 1993 (earlier for larger volume stations) or at the time of Underground Storage Tank (UST) compliance work, whichever occurs sooner.
- HOW TO COMMENT:** Copies of the complete proposed rule package may be obtained from: Air Quality Division, Department of Environmental Quality, 811 S.W. Sixth Avenue, Portland, OR 97204 or the regional office nearest you. For further information contact Merlyn Hough at (503) 229-6446.

A public hearing will be held before a hearings officer at:

1:30 p.m.  
February 20, 1991  
Department of Environmental Quality  
Conference Room 3A  
811 SW Sixth Avenue  
Portland, OR 97204

Oral and written comments will be accepted at the public hearing. Written comments may be sent to the DEQ, but must be received by no later than February 25, 1991.



811 S.W. 6th Avenue  
Portland, OR 97204

11/1/86

**FOR FURTHER INFORMATION:**

Contact the person or division identified in the public notice by calling 229-5696 in the Portland area. To avoid long distance charges from other parts of the state, call 1-800-452-4011.

D-1

**WHAT IS THE  
NEXT STEP:**

After public hearing the Environmental Quality Commission may adopt rule amendments identical to the proposed amendments, adopt modified rule amendments on the same subject matter, or decline to act. The adopted rules will be submitted to the U.S. Environmental Protection Agency as part of the State Clean Air Act Implementation Plan. The Commission's deliberation should come in April 1991 as part of the agenda of a regularly scheduled Commission meeting.

A Statement of Need, Fiscal and Economic Impact Statement, and Land Use Consistency Statement are attached to this notice.

MLH:a  
PLAN\AH11281

468.300

## PUBLIC HEALTH AND SAFETY

(2) In determining air purity standards, the commission shall consider the following factors:

(a) The quality or characteristics of air contaminants or the duration of their presence in the atmosphere which may cause air pollution in the particular area of the state;

(b) Existing physical conditions and topography;

(c) Prevailing wind directions and velocities;

(d) Temperatures and temperature inversion periods, humidity, and other atmospheric conditions;

(e) Possible chemical reactions between air contaminants or between such air contaminants and air gases, moisture or sunlight;

(f) The predominant character of development of the area of the state, such as residential, highly developed industrial area, commercial or other characteristics;

(g) Availability of air-cleaning devices;

(h) Economic feasibility of air-cleaning devices;

(i) Effect on normal human health of particular air contaminants;

(j) Effect on efficiency of industrial operation resulting from use of air-cleaning devices;

(k) Extent of danger to property in the area reasonably to be expected from any particular air contaminants;

(l) Interference with reasonable enjoyment of life by persons in the area which can reasonably be expected to be affected by the air contaminants;

(m) The volume of air contaminants emitted from a particular class of air contamination source;

(n) The economic and industrial development of the state and continuance of public enjoyment of the state's natural resources; and

(o) Other factors which the commission may find applicable.

(3) The commission may establish air quality standards including emission standards for the entire state or an area of the state. The standards shall set forth the maximum amount of air pollution permissible in various categories of air contaminants and may differentiate between different areas of the state, different air contaminants and different air contamination sources or classes thereof. [Formerly 449.785]

468.300 When liability for violation not applicable. The several liabilities which may be imposed pursuant to ORS 448.305, 454.010

to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and this chapter upon persons violating the provisions of any rule, standard or order of the commission pertaining to air pollution shall not be so construed as to include any violation which was caused by an act of God, war, strife, riot or other condition as to which any negligence or wilful misconduct on the part of such person was not the proximate cause. [Formerly 449.825]

468.305 General comprehensive plan. Subject to policy direction by the commission, the department shall prepare and develop a general comprehensive plan for the control or abatement of existing air pollution and for the control or prevention of new air pollution in any area of the state in which air pollution is found already existing or in danger of existing. The plan shall recognize varying requirements for different areas of the state. [Formerly 449.782]

468.310 Permits. By rule the commission may require permits for air contamination sources classified by type of air contaminants, by type of air contamination source or by area of the state. The permits shall be issued as provided in ORS 468.065. [Formerly 449.727]

468.315 Activities prohibited without permit; limit on activities with permit. (1) Without first obtaining a permit pursuant to ORS 468.065, no person shall:

(a) Discharge, emit or allow to be discharged or emitted any air contaminant for which a permit is required under ORS 468.310 into the outdoor atmosphere from any air contamination source.

(b) Construct, install, establish, develop, modify, enlarge or operate any air contamination source for which a permit is required under ORS 468.310.

(2) No person shall increase in volume or strength discharges or emissions from any air contamination source for which a permit is required under ORS 468.310 in excess of the permissive discharges or emission specified under an existing permit. [Formerly 449.731]

468.320 Classification of air contamination sources; registration and reporting of sources. (1) By rule the commission may classify air contamination sources according to levels and types of emissions and other characteristics which cause or tend to cause or contribute to air pollution and may require registration or reporting or both for any such class or classes.

(2) Any person in control of an air contamination source of any class for which registration and reporting is required under subsection (1) of this section shall register



more air contaminants which contribute to a condition of air pollution.

(4) "Air contamination source" means any source at, from, or by reason of which there is emitted into the atmosphere any air contaminant, regardless of who the person may be who owns or operates the building, premises or other property in, at or on which such source is located, or the facility, equipment or other property by which the emission is caused or from which the emission comes.

(5) "Air pollution" means the presence in the outdoor atmosphere of one or more air contaminants, or any combination thereof, in sufficient quantities and of such characteristics and of a duration as are or are likely to be injurious to public welfare, to the health of human, plant or animal life or to property or to interfere unreasonably with enjoyment of life and property throughout such area of the state as shall be affected thereby.

(6) "Area of the state" means any city or county or portion thereof or other geographical area of the state as may be designated by the commission.

(7) "Woodstove" means a wood fired appliance with a closed fire chamber which maintains an air-to-fuel ratio of less than 30 during the burning of 90 percent or more of the fuel mass consumed in the low firing cycle. The low firing cycle means less than or equal to 25 percent of the maximum burn rate achieved with doors closed or the minimum burn achievable. [Formerly 449.760; 1983 c.333 §1]

**468.280 Policy.** (1) In the interest of the public health and welfare of the people, it is declared to be the public policy of the State of Oregon:

(a) To restore and maintain the quality of the air resources of the state in a condition as free from air pollution as is practicable, consistent with the overall public welfare of the state.

(b) To provide for a coordinated state-wide program of air quality control and to allocate between the state and the units of local government responsibility for such control.

(c) To facilitate cooperation among units of local government in establishing and supporting air quality control programs.

(2) The program for the control of air pollution in this state shall be undertaken in a progressive manner, and each of its successive objectives shall be sought to be accomplished by cooperation and conciliation among all the parties concerned. [Formerly 449.765]

**468.285 Purpose.** It is the purpose of the air pollution laws contained in ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and this chapter to safeguard the air resources of the state by controlling, abating and preventing air pollution under a program which shall be consistent with the declaration of policy in this section and with ORS 468.280. [Formerly 449.770]

**468.290 Application of air pollution laws.** Except as provided in this section and in ORS 468.450, 476.380 and 478.960, the air pollution laws contained in this chapter do not apply to:

(1) Agricultural operations and the growing or harvesting of crops and the raising of fowls or animals, except field burning which shall be subject to regulation pursuant to ORS 468.140, 468.150, 468.455 to 468.480 and this section;

(2) Use of equipment in agricultural operations in the growth of crops or the raising of fowls or animals, except field burning which shall be subject to regulation pursuant to ORS 468.140, 468.150, 468.455 to 468.480 and this section;

(3) Barbecue equipment used in connection with any residence;

(4) Agricultural land clearing operations or land grading;

(5) Heating equipment in or used in connection with residences used exclusively as dwellings for not more than four families, except woodstoves which shall be subject to regulation under this section and ORS 468.630 to 468.655;

(6) Fires set or permitted by any public agency when such fire is set or permitted in the performance of its official duty for the purpose of weed abatement, prevention or elimination of a fire hazard, or instruction of employees in the methods of fire fighting, which in the opinion of the agency is necessary;

(7) Fires set pursuant to permit for the purpose of instruction of employees of private industrial concerns in methods of fire fighting, or for civil defense instruction; or

(8) The propagation and raising of nursery stock, except boilers used in connection with the propagation and raising of nursery stock. [Formerly 442.775; 1975 c.559 §3; 1983 c.333 §2; 1983 c.730 §3]

**468.295 Air purity standards; air quality standards.** (1) By rule the commission may establish areas of the state and prescribe the degree of air pollution or air contamination that may be permitted therein, as air purity standards for such areas.



## Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

DATE: September 5, 1990

TO: Environmental Quality Commission

FROM: Fred Hansen

SUBJECT: September 20, 1990, Work Session  
Stage II Vapor Recovery at Gasoline Stations

### Overview

Stage II vapor recovery (collection of vehicle refueling vapors) at gasoline stations is the most significant and cost-effective control measure available to the Department of Environmental Quality (Department) to insure attainment and maintenance of the ozone standard and provide for growth and development in the Portland area. In order to evaluate Stage II alternatives, the Department formed the Stage II Technical Advisory Committee (Committee) in May 1989 with representatives from various industry, government and environmental groups.

In November 1989, the Department and the Stage II Technical Advisory Committee recommended that Stage II underground piping requirements be required over a 24-month period and coordinated with Underground Storage Tank (UST) compliance work as the first step in implementing Stage II vapor recovery. Above-ground Stage II work was recommended to be delayed until the new Clean Air Act clarified the availability of Stage II reductions for use as a growth cushion. The Environmental Quality Commission (EQC, Commission) discussed Stage II at the November 1989 and January 1990 EQC work sessions and authorized a public hearing for July 1990.

Testimony at the public hearing and other recent developments (continued ozone violations, tighter new federal gasoline volatility limits, federal Clean Air Act bills passing the House and Senate) have caused the Department to reconsider the implementation approach for Stage II vapor recovery. We believe it is now appropriate to bypass the intermediate step of requiring underground piping and consider full implementation of Stage II and would like to discuss this with you at the September work session.

### Recent Developments

- o Ozone levels in the Portland-Vancouver area this summer violated the ozone standard and clearly keeps the area classified as nonattainment.

- o The U.S. Environmental Protection Agency (EPA) adopted Phase II gasoline refinery requirements that tighten limits on summer gasoline volatility (the tendency of the gasoline to vaporize into the atmosphere) effective in 1992. The volatility limits for Oregon are tighter than originally expected.
- o The House and Senate have adopted Clean Air Act versions and the bills are now in Conference Committee. It now appears clear that the Clean Air Act language would not require Stage II or affect the use of Stage II credits for growth cushion in the Portland-Vancouver area.

### Future Ozone Projections

An estimate of the effects of the various gasoline vapor controls on future Portland area ozone-precursor emissions (non-methane hydrocarbons or NMHC) can be made using EPA generated national information applicable to the Portland area.

- o Figure 1 shows that refueling vapors are significantly controlled by either Stage II at gasoline stations or onboard canisters on motor vehicles; Phase I or Phase II volatility limits have only modest effects on refueling vapor control.
- o Either Stage II or onboard controls ultimately produce about the same emission reduction but in terms of implementation timing Stage II provides the reductions earlier, thus being most effective over the next five to ten years as shown in Figure 2.
- o A general projection of future total emissions and ozone air quality with Phase I and II volatility control and Stage II is shown in Figure 3. The ozone attainment line is based on an approximate 15-20% reduction needed in total NMHC emissions projected from the most recent ozone levels.
- o This preliminary projection indicates that the Portland-Vancouver area will attain ozone standards between 1990 and 1995.
- o Additional control strategies (such as tighter federal tailpipe limits on new vehicles, etc.) may be needed after 2005 to maintain compliance with the ozone standard as the population, traffic and economy continue to grow.
- o Stage II is especially important to provide airshed room for growth and development during the 1990s.

Public Hearing Testimony

- o The groups that had been represented on the Committee gave widely differing testimony and none of these groups supported the specific proposal.
- o The petroleum marketers and gasoline dealers opined that the proposal was too much too soon; in addition, the proposal would force business decisions on installation of underground piping before a decision had been made on the overall Stage II requirements.
- o The environmental groups opined that the proposal was too little since it would only require the underground piping portion which would not, by itself, provide any emission reduction; they also recommended larger boundaries over time.
- o The testimony clarified that the November 1989 recommendation of the Committee did not represent a tight consensus but rather a middle ground within widely differing views. A summary of the public hearing testimony is attached (Attachment C).

Based on the public hearing testimony and the other recent developments, the Department believes it is appropriate to by pass the intermediate step of requiring underground piping and proceed with full implementation of Stage II vapor recovery (above- and below-ground portions).

Followup Meeting with Advisory Committee

- o Department staff met again with the Stage II Technical Advisory Committee on August 29, 1990, to discuss boundaries, gallons per month (gal/mo) exemption cutpoints, and schedules for full implementation of Stage II vapor recovery.
- o Should the Commission elect to support full Stage II, the Committee generally favored phase-in of Stage II systems over a time period of three or more years, with Stage II systems required on largest stations first, smaller stations later.
- o The Committee was divided between the two following implementation options:

<u>Throughput</u>	<u>Date</u>	<u>Boundaries</u>
200,000 gal/mo	12/31/91	Multnomah, Washington, Clackamas, Yamhill, Lane and Jackson Counties
100,000 gal/mo	12/31/92	" " " " " "
40,000 gal/mo	12/31/93	" " " " " "
40,000 gal/mo	12/31/94	Rest of Willamette Valley
40,000 gal/mo	12/31/95	Statewide

OR

250,000 gal/mo	12/31/91	Multnomah, Washington and Clackamas Counties
150,000 gal/mo	12/31/92	" " "
75,000 gal/mo	12/31/93	" " "
50,000 gal/mo	12/31/94	" " "

- o The Committee's recommendations for extended schedules were apparently based on:
  - concerns that enough qualified installers were not available to do the work within a shorter time period; and
  - expectations that the gasoline throughput from the largest stations (200,000 gal/mo or larger) represented a significant portion of the total gasoline throughput.

Alternatives

1. Adopt original proposal to require installation of Stage II underground piping at November 1990 EQC meeting, and consider above-ground requirements after final Clean Air Act reauthorization.
2. Request hearing authorization at November 1990 EQC meeting for complete Stage II systems (above- and below-ground portions).

Discussion

Stage II has both air quality and economic development benefits. Stage II has been proposed by DEQ because:

- o It is the most cost-effective control measure available to the State to further reduce ozone-causing emissions, and potentially the only measure available as growth cushion for economic development during continued nonattainment status (national volatility limits or onboard requirements would not be available for growth cushion since they would be required on a national basis);
- o It complements very well the tightening of gasoline volatility limits;
- o It would fill the timing gap until onboard canisters are required on new cars (not yet adopted, then 15-20 years to realize maximum benefit from onboard).

Full implementation of Stage II vapor recovery on gasoline stations would also:

- o Reduce toxic emissions and exposures of benzene, toluene and xylene;
- o Provide some gasoline conservation benefits due to capture and recycling of refueling vapors.

Full implementation of Stage II vapor recovery on gasoline stations is consistent with:

- o EQC Strategic Plan, Goal 3: Ensure that unallocated assimilative capacity exists by applying highest and best technology in conjunction with pollution prevention methods; and
- o Oregon Benchmarks (public review draft by Oregon Progress Board): Remove airshed barriers to industrial development by 1995.

The Department believes the recent developments listed earlier strengthen the need to proceed with full implementation of Stage II. Full implementation of Stage II would provide the only near-term option of providing significant growth allocation for new economic development and would further insure attainment and maintenance of the ozone standard in the Portland area.

#### Issues for the Commission to Resolve

The key issues under either alternative are the boundaries, exemption cutpoints and schedules. The Stage II underground piping proposal that went to public hearing in July 1990:

- o Addressed only the three Portland-area counties (Multnomah, Washington and Clackamas);
- o Had an exemption cutpoint of 10,000 gallons per month that would affect about 89% of the gasoline stations and 99% of the gasoline throughput;
- o Required underground piping at the time of UST compliance work or within 24 months, whichever occurred sooner.

The Department proposes and seeks concurrence from the Commission on the following guiding principles for evaluating the Committee recommendations and determining the Stage II boundaries, exemption cutpoints, and schedules:

- o The three Portland-area counties should be addressed first since they are within the ozone nonattainment area and subject to airshed barriers to growth and development (with other areas considered later after further evaluation);

- o The exemption cutpoints and schedules should affect a substantial portion of the regional gasoline throughput during the first and second years of the Stage II program in order to provide airshed room for growth and development;
- o The exemption cutpoints and schedules should affect larger stations first and smaller stations later;
- o The exemption cutpoints and schedules should affect a relatively constant number of tanks each year to insure orderly implementation within the ability of qualified contractors; and
- o Stage II implementation in the Portland area should be essentially completed by the end of 1993 to insure ozone compliance and accommodate potentially explosive growth of population, traffic and businesses.

The Department cannot fully evaluate the Committee recommendation against these principles until it gets more specific information on gasoline throughput of stations in the Portland area. This information will be obtained and evaluated in time to make a specific recommendation to the Commission at the November meeting

#### Recommendation

The Department recommends that we proceed with full implementation of Stage II vapor recovery (Alternative 2) and that potential boundaries, exemption cutpoints, and schedules be based on the guiding principles identified by the Department.

If the EQC authorized a public hearing on complete Stage II systems at the November 1990 meeting, then a public hearing could be held in January 1991, with adoption considered in March 1991. Action on the Clean Air Act reauthorization should be completed before Stage II adoption.

Approved:

Section:

Merlyn Hough for John Kowalczyk

Division:

Tom Buehler

Director:

Jul Hansen

Report Prepared By: Merlyn L. Hough

Phone: 229-6446

Date Prepared: September 5, 1990

- Attachments:
- A) Figures 1, 2 and 3.
  - B) Stage I and Stage II diagrams
  - C) Summary of public hearing testimony

PLAN\AH10601

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: March 22, 1991

TO: Environmental Quality Commission

FROM: Jerry Coffey, Hearing Officer

SUBJECT: Public Hearing on February 20, 1991, in Portland:

Control of Vapors from Gasoline Dispensing Stations in  
Clackamas, Multnomah and Washington Counties

Schedule and Procedures

The public hearing was held at the Executive Building at 811 S.W. Sixth Avenue in Portland, Oregon, on February 20, 1991. Public notice was published in the Oregonian and the Secretary of State Bulletin at 32 days and 20 days, respectively, prior to the hearing. Jerry Coffey was the Hearing Officer.

A total of nine people provided testimony during the public hearing process. Verbal testimony was given by three persons. Written testimony was submitted by all nine participants. All of the written materials have been photocopied and provided to each member of the Environmental Quality Commission.

Summary of Testimony

Joseph Weller, American Lung Association of Oregon, urged the adoption of the Stage II rules proposed by the Department for the Portland area. Referring to the toxicity of refueling gasoline vapors, Mr. Weller suggested that the Department of Environmental Quality (Department) soon begin the process of drafting rules to require Stage II vapor control on service stations throughout Oregon to be implemented within this decade, with faster implementation in urban areas. Mr. Weller stressed that drafting statewide rules early would save money for stations who would then be inclined to do underground Stage II work at the time of Underground Storage Tank (UST) improvements.

Leo Denn, a resident of Klamath Falls, expressed concern that Stage II vapor recover leads to more spilling of gasoline liquid during the vehicle fueling process.



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March 22, 1991  
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Quincy Sugarman, spokesperson for the Oregon State Public Interest Research Group (OSPIRG), was concerned about the toxicity of gasoline vapor and called for statewide Stage II. She suggested that areas with the highest ambient ozone levels be the first to require Stage II, including Lane County and Medford areas. Ms. Sugarman supported the Department's Stage II proposal for the Portland area as a first step in controlling gasoline vapor emissions.

Peggy Manning, representing the Oregon Gasoline Dealers Association, opposes the Stage II regulations proposed by the Department. She said the "cost to small business is too great a sacrifice" to create a growth cushion for the Portland airshed. She said small marketers are "already reeling from the UST technical and financial responsibility regulations." Ms. Manning estimates the average cost of UST tank replacement is \$75,000 to \$100,000. She said that even with the State Loan Program for UST work, "it is next to impossible" for a small business owner to find a bank loan. Ms. Manning was also concerned that the small marketer "will be at an extreme disadvantage when trying to find competent, experienced contractors" to do Stage II work because of the greater economic power of the large companies. She also quotes a survey done by the Southern California Service Station Dealers Association which showed a yearly maintenance cost for an average station to be close to \$6000.

As a response to the concerns expressed above, Ms. Manning Proposed the following Stage II implementation plan for the Portland tri-county area:

- 1) All gasoline marketers with three or less service station sites be exempt from Stage II vapor recovery implementation regulation until such time as each of those sites is upgraded to comply with the technical standards of the underground storage tank regulations.
- 2) If the station is already in compliance with UST, and has the underground piping in place for Stage II, compliance would go into effect as is proposed under the plan enacted by DEQ.
- 3) If USTs have already been upgraded and are in compliance with the UST technical regulation, but do not have underground piping for Stage II in place, than those marketers be given three years to install Stage II vapor recovery equipment both below ground and above ground.

John Phimister, Western Stations Co., felt that the first tier of the Department's proposed Stage II implementation strategy was

required too soon, especially for small businesses. He suggested a delay of up to one year for small companies. He also strongly recommended that the Department propose "tax credits or a funding mechanism to assist with the expense of Stage II compliance."

James White with ARCO Products Company expressed concern that there would not be adequate experienced contract labor and equipment to meet the 1st tier deadline for Stage II implementation, especially considering that Stage II will be required in Las Vegas, Reno, California areas and Washington in the same time frame. Mr. White further explained that small business independents have stations with high throughput and that these small businesses would incur the greatest injustice.

Mr. White suggested the following Stage II implementation schedule for the Portland tri-county area:

- 1st Tier Owners of 5 or more stations install Stage II on 1/3rd of their stations before 4/30/92.
- 2nd Tier Owners of 5 or more stations install Stage II on 2/3rds of their stations before 8/31/93.
- 3rd Tier All station not otherwise exempt from Stage II requirements must install Stage II before 12/31/94.

In addition, Mr. White recommended a DEQ policy of allowing waivers to those station owners who have shown good faith effort to comply with the Department's Stage II implementation schedule. Mr. White also said it is essential that DEQ have adequate staff to inspect and enforce the Stage II requirements.

Mr. White also sent the Department the following gasoline throughput statistics for the Portland area.

<u>Distributor</u>	<u>Actual Stations</u>	<u>Total Thru-put All Stations</u>	<u>Avg. Thru-put Per Station</u>	<u>Mkt. Share</u>
ARCO	60	8,764,000	140,000	24%
BP	61	6,628,000	109,000	18%
Chevron	56	6,408,000	112,000	17%
Shell	47	2,149,000	46,000	6%
Texaco	79	6,957,000	85,000	19%
Unocal	31	2,039,000	64,000	5%
Non Majors	87	4,046,000	49,000	11%
TOTALS	421	36,991,000	90,000	100%
Total Majors	334	32,945,000	96,000	89%

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March 22, 1991  
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William Kelly, with Multinational Business Services, Inc. in Washington, D.C., commented that there was no truth to the prospect that the U.S. Environmental Protection Agency (EPA) might be considering retrofitting vehicles with refueling vapor control canisters. He states that the 1990 Clean Air Act is requiring onboard vapor controls on "new" light duty vehicles beginning in the fourth model year after regulations are promulgated, and that a three-year phase-in will be required. He also stated that onboard control "might not be promulgated at all" if EPA and the U.S. Department of Transportation (DOT) cannot resolve safety issues.

Donald Gilson of Chevron U.S.A., Inc. was concerned that the compliance dates were extremely tight and suggested that the implementation date for the first two tiers of stations (>150,000 gallons/month and 90,000-150,000 gallons/month) be delayed by four months. He said that this delay should not create any additional potential for ozone exceedances.

JC:jc

Meeting Date: December 14, 1990  
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In addition, gasoline stations in these counties that have not already installed Stage I vapor recovery systems (control of vapors from tanker truck to service station storage tank) would be required to do so within the same schedule; gasoline stations within the Portland-Vancouver Air Quality Maintenance Area (which includes most of the stations in the three counties) were previously required to implement Stage I by April 1981.

AUTHORITY/NEED FOR ACTION:

___ Required by Statute: _____	Attachment ___
Enactment Date: _____	
<u>X</u> Statutory Authority: <u>ORS 468.295</u>	Attachment <u>E</u>
___ Pursuant to Rule: _____	Attachment ___
___ Pursuant to Federal Law/Rule: _____	Attachment ___

X Time Constraints:

Most of the Underground Storage Tank (UST) compliance work will be completed by October 1991. By including the underground piping for Stage II vapor recovery at the same time as UST compliance work, it is expected that the overall cost of the two actions will be reduced.

The Portland-Vancouver area continues to violate the air quality health standards for ozone. Timely implementation of Stage II vapor recovery is one of the most cost-effective pollution control actions available to address this problem.

DEVELOPMENTAL BACKGROUND:

X Advisory Committee Report/Recommendation Attachment F  
(Incorporated within 09/20/90 EQC Work Session report)

X Prior EQC Agenda Items:

11/30/89 EQC Work Session	
01/18/90 EQC Work Session	
05/25/90 EQC Meeting	
09/20/90 EQC Work Session	Attachment <u>F</u>

Initially, the Stage II Technical Advisory Committee and Department of Environmental Quality (DEQ) staff proposed that the underground piping portion of Stage II vapor recovery be coordinated with UST compliance work and be completed within 24 months for gasoline stations with monthly gasoline throughput of 10,000 gallons or more per month within Clackamas, Multnomah and Washington Counties. The



## Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

### REQUEST FOR EQC ACTION

Meeting Date: December 14, 1990  
 Agenda Item: D  
 Division: Air Quality  
 Section: Planning & Development

#### SUBJECT:

Authorization for Rulemaking Hearing on Requirements for Stage II Vapor Recovery at Gasoline Stations.

#### PURPOSE:

To provide a cost-effective means of helping to attain and maintain compliance with ozone air quality standards while accommodating growth and development.

#### ACTION REQUESTED:

<input checked="" type="checkbox"/>	Authorize Rulemaking Hearing	
<input type="checkbox"/>	Adopt Rules	
	Proposed Rules	Attachment <u>A</u>
	Rulemaking Statements	Attachment <u>B</u>
	Fiscal and Economic Impact Statement	Attachment <u>C</u>
	Public Notice	Attachment <u>D</u>

#### DESCRIPTION OF REQUESTED ACTION:

This report requests authorization to hold a public hearing on proposed requirements for Stage II vapor recovery (control of motor vehicle refueling vapors) at gasoline stations.

The proposed rules would require the installation of Stage II vapor recovery equipment over the next one to three years, depending on the gasoline throughput volume of the station. Larger stations would be affected first and smaller stations later within the three-year period.

The proposal would ultimately affect gasoline stations with an annual gasoline throughput of 600,000 gallons or more (i.e., monthly average throughput of 50,000 gallons or more) in Clackamas, Multnomah and Washington Counties.

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Environmental Quality Commission (EQC) authorized a July 18, 1990, public hearing on that proposal.

As a result of public hearing criticism, ozone violations during July and August, and Clean Air Act clarifications on airshed growth cushions, the Department recommended that we bypass the intermediate step of requiring underground piping and consider full implementation of Stage II.

Department staff met with the Stage II Technical Advisory Committee on August 29, 1990, to discuss boundaries, gallons per month (gal/mo) exemption cutpoints, and schedules for full implementation of Stage II vapor recovery.

The Committee generally favored phase-in of Stage II systems over a time period of three or more years, with Stage II systems required on largest stations first and smaller stations later.

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

The Department's current proposal would affect gasoline stations with an annual gasoline throughput of 600,000 gallons or more (i.e., monthly average throughput of 50,000 gallons or more) in Clackamas, Multnomah and Washington Counties.

The proposed rules would require both the underground piping and the above-ground equipment for Stage II vapor recovery systems. The total capital cost is estimated to be \$10,000 to \$28,000 for a typical 12-nozzle station. The cost would generally be in the lower part of this range if the underground piping was coordinated with UST compliance work.

Gasoline stations within the Portland-Vancouver Air Quality Maintenance Area (AQMA) were required to install Stage I by April 1981. The proposed rules would require Stage I for gasoline stations outside the AQMA but within the three-county area. The capital costs for Stage I vapor control systems are estimated at \$1000 to \$2000 per typical gasoline station.

The Stage II vapor recovery requirements are not required by the Clean Air Act of 1990 and are not proposed as part of the State Implementation Plan; this approach allows the state to use Stage II emission reductions for growth cushion as needs arise, as well as for attainment and maintenance of ozone standards.

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Additional cost information is included in the Fiscal and Economic Impact Statement (Attachment C).

PROGRAM CONSIDERATIONS:

Costs to the Department would fall into five categories:

- o Registration of equipment to be regulated;
- o Review and/or inspection of installation;
- o Education of the regulated community;
- o Periodic inspection and/or performance testing;
- o Enforcement and followup inspections.

A stand-alone Stage II Vapor Recovery program operated independently by the Air Quality Division in the Portland metropolitan area would require two full-time-equivalent (FTE) positions and an annual budget of \$125,000. Substantial cost savings are possible (as much as 50%) if a cooperative approach is taken with existing programs in the Department of Agriculture Weights & Measures Division (which already inspects metering systems on all retail gasoline pumps), DEQ Underground Storage Tank Program (which already regulates underground gasoline tank installations), and DEQ Regional Operations (which already does inspections and enforcement on many pollution sources).

EPA has agreed to provide the funding for initial training of installers and inspectors. The Department will work with the other involved parties to determine the appropriate funding mechanism (federal funds or permit fees) for the ongoing compliance program.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

The Stage II Technical Advisory Committee was divided between two implementation alternatives. Environmental representatives generally favored the first alternative; industry representatives generally favored the second; both alternatives are listed below. After gathering additional information on contractor availability and gasoline throughput distribution, the Department proposes a third alternative. This alternative is somewhat of a compromise between the first two alternatives and better meets the guiding principles (discussed at the September EQC work session) for the program.

First Alternative

<u>Throughput</u>	<u>Date</u>	<u>Boundaries</u>
200,000 gal/mo	12/31/91	Multnomah, Washington, Clackamas, Yamhill, Lane and Jackson Counties
100,000 gal/mo	12/31/92	" " " " " "
40,000 gal/mo	12/31/93	" " " " " "
40,000 gal/mo	12/31/94	Rest of Willamette Valley
40,000 gal/mo	12/31/95	Statewide

Second Alternative

<u>Throughput</u>	<u>Date</u>	<u>Boundaries</u>
250,000 gal/mo	12/31/91	Multnomah, Washington and Clackamas Counties
150,000 gal/mo	12/31/92	" " "
75,000 gal/mo	12/31/93	" " "
50,000 gal/mo	12/31/94	" " "

Third Alternative

<u>Throughput</u>	<u>Date</u>	<u>Boundaries</u>
150,000 gal/mo	12/31/91	Multnomah, Washington and Clackamas Counties
90,000 gal/mo	12/31/92	" " "
50,000 gal/mo	12/31/93	" " "

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

The Department recommends the third alternative. This alternative is consistent with the five guiding principles that the Department recommended to the Commission at the September 20, 1990, EQC Work Session:

1. The three Portland-area counties should be addressed first since they are within the ozone nonattainment area and subject to airshed barriers to growth and development (with other areas considered later after further evaluation);
2. The exemption cutpoints and schedules should affect a substantial portion of the regional gasoline throughput during the first and second years of the Stage II program in order to provide airshed room for growth and development;



3. The exemption cutpoints and schedules should affect larger stations first and smaller stations later;
4. The exemption cutpoints and schedules should affect a relatively constant number of stations each year to insure orderly implementation within the ability of qualified contractors; and
5. Stage II implementation in the Portland area should be essentially completed by the end of 1993 (deadline for ozone attainment in 1990 Clean Air Act for marginal ozone nonattainment area) to insure ozone compliance and accommodate potentially explosive growth of population, traffic and businesses.

The Stage II Technical Advisory Committee was divided between the first and second implementation alternatives. The Committee's recommendations for extended schedules were apparently based on: (1) concerns that enough qualified installers were not available to do the work within a shorter time period; and (2) expectations that the gasoline throughput from the largest stations (200,000 gal/mo or larger) represented a significant portion of the total gasoline throughput. The Department indicated at the September 20, 1990, EQC Work Session that staff would gather additional information on both of these issues (i.e., the availability of qualified contractors and the size distribution of gasoline stations) prior to recommending a specific proposal to the Commission.

The Department contacted qualified contractors in order to assess the impact of Stage II vapor recovery requirements on their workload. Stage II on gasoline stations in the Portland area would represent a minor portion (estimated 8-12%) of their total workload on underground storage tanks (total workload for all tanks, not just gasoline stations) over the next three years. The contractors indicated that it was feasible to increase their work force by 50-100% over a two-year period if necessary to handle an increased workload.

In September 1990, the Department initiated the registration of gasoline stations in Clackamas, Multnomah and Washington Counties in order to obtain more complete information on gasoline throughput by station. The results of this registration were:

- o About 91% of the gasoline throughput occurred in the larger 62% of the gasoline stations that had a monthly throughput of more than 50,000 gallons per month.

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- o Of the stations larger than 50,000 gallons per month, about one-third were larger than 150,000 gallons per month (16% of the total stations), another third were between 90,000 and 150,000 gallons per month (23% of the total stations), and the other third were between 50,000 and 90,000 gallons per month (23% of total stations).
- o Gasoline stations larger than 150,000 gallons per month accounted for 39% of the total gasoline throughput, stations between 90,000 and 150,000 gallons per month accounted for an additional 33% of the total throughput, and stations between 50,000 and 90,000 accounted for an additional 19% of the throughput.

Based on the five guiding principles discussed at the September 20, 1990, EQC Work Session, and additional information on qualified contractors and the size distribution of gasoline stations, the Department recommends the third alternative.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

The proposed rules are consistent with Goals 3 and 8 of the Strategic Plan. The Department is not aware of any conflicts with agency or legislative policy.

ISSUES FOR COMMISSION TO RESOLVE:

Should the Commission propose an alternative which is slightly different than either the alternative favored by environmental representatives of the advisory committee or that favored by industry representatives?

INTENDED FOLLOWUP ACTIONS:

1. Hold public hearing in February 1991.
2. Summarize public testimony, respond to issues, revise proposed rules as necessary, and recommend adoption of revised rules to Commission at April 1991 EQC meeting.
3. Coordinate proposed Stage II program with DEQ Underground Storage Tank program and Department of Agriculture, Weights and Measures Division, and DEQ Regional Operations, and determine the funding mechanism for compliance program.

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4. Evaluate other areas of Oregon for implementation of Stage II vapor recovery as part of an air toxics control strategy, and report back to the Commission in approximately one year as discussed at the September 20, 1990, EQC work session.

Approved:

Section:

John F. Kawalyk

Division:

Tom Bingham

Director:

Jill Housh

Report Prepared By: Merlyn Hough  
Phone: 229-6446  
Date Prepared: November 14, 1990

MLH:a  
PLAN\AH11277  
(11/21/90)

Supplement to  
EQC Agenda Item I  
April 26, 1991  
Written Testimony

**PUBLIC HEARING TESTIMONY  
ON PROPOSED STAGE II VAPOR RECOVERY  
FOR GASOLINE STATIONS IN THE PORTLAND AREA**

**(Copies of Written Testimony)**

# OSPIRG

The Oregon State Public Interest Research Group

1536 SE 11th

Portland, Oregon 97214

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Testimony of  
Quincy Sugarman  
Environmental Advocate for the  
Oregon State Public Interest Research Group  
in support of  
Gasoline Vapor Recovery (Stage II)  
February 20, 1991

Thank you for the opportunity to testify. My name is Quincy Sugarman. I am an environmental advocate for the Oregon State Public Interest Research Group, and I was a member of the Stage II Technical Advisory Committee.

I am speaking in support of the proposed rule package as the minimum requirements for implementing control of vapors from gasoline dispensing stations. Stage II should be implemented in Multnomah, Washington and Clackamas counties with an exemption for low volume stations. The city of Portland exceeded the federal air quality standard for ozone on four days last year. Ground level ozone can cause respiratory problems. Gasoline vapor recovery prevents the vapors from escaping into the air to form ozone air pollution. In addition there is potential recovery of the vapor to use as fuel. These benefits to public health and the environmental protection would extend to the entire state if Stage II was required for the entire state.

An important point regarding this program is that Stage II is a pollution prevention strategy. By recapturing vapors that would have evaporated into the lower atmosphere and recovering those vapors into gasoline, we

can reduce the use of the toxic chemicals that directly fuel motor vehicles and the production of those toxic chemicals that are use in refining or are by-products of manufacturing motor vehicle fuel.

The 1989 Legislature passed important legislation focused on pollution prevention in the Toxic Use Reduction and Hazardous Waste Reduction Act. That act prioritizes prevention strategies over those that manage or control pollution after it is already created. OSPIRG strongly supports preventing pollution as the ultimate solution to many of the public health and environmental problems associated with the continued use of toxic chemicals.

Stage II reduces worker, consumer and environmental exposure to toxic components of gasoline through use of currently available technology. It is a cost-effective way to reduce toxic emissions from a very common source, motor vehicle refueling, as documented in California. Other states and localities have chosen to implement Stage II to protect public health, comply with federal clean air standards, and as part of their own pollution prevention strategies.

The department should adopt the proposed rule package for Stage II implementation. In addition we encourage the department to consider requiring Stage II statewide so that the benefits to public health and the environment accrue to all Oregonians. Efforts could begin on those areas of the state that have the highest ozone levels, Lane County and the Medford area. The efforts should be to make Oregon's air cleaner and healthier overall, not simply to shift the pollution from one source to another.

Thank you, and I am available to answer any questions.



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Testimony on Rules to adopt Stage II Fuel Vapor Recovery requirements in the Portland Metropolitan area. February 20, 1991

Joseph Weller  
American Lung Association of Oregon

I urge adoption by the Environmental Quality Commission of the proposed rules to require Stage II systems on certain gasoline stations in the Portland Metropolitan area.

Fuel vapors are a significant source of breathing level ozone precursors. They are also a significant source of ambient and occupational hazardous air pollutant exposure.

The fact that fuel vapors result in ozone production in the atmosphere is well documented. As one of the six regulated criteria air pollutants, ozone has clearly been recognized as a pollutant of extreme importance.

Portland remains a nonattainment area for ozone. The citizens of the metropolitan region do not have the choice of breathing clean, healthful air. Without significant efforts, ozone problems will worsen and human health and the ecosystem will sustain preventable damage.

A major goal of the Lung Association for the decade of the 1990's is a reduction in total pollutants emitted into Oregon's air. The requirement that Stage II recovery systems be installed in the Metropolitan region is a step in the right direction.

However, considering the potent mixture of toxins present in gasoline vapors and their ability to undergo chemical transformation in the atmosphere, I believe that the department should begin the process of drafting rules to require that all gasoline stations in the state be equipped with Stage II systems within this decade. Certainly these rules should require expedited time lines for urban counties.

The department will be ill advised to ignore the possibility that drafting rules quickly will result in significant savings to the affected stations. Any station which can combine Underground Storage Tank work with re-piping for Stage II will save thousands of dollars. The department needs to send the message loud and clear to all stations that Stage II is coming.



February 16, 1991


Department of Environmental Quality  
Air Quality Division  
811 Southwest Sixth Avenue  
Portland, OR. 97204

**AIR QUALITY DIVISION**

Dear Sir:

Western Stations Co. is a small, independent seller of gasoline and diesel petroleum products in the states of Washington, Oregon, and Idaho. Our company works hard at keeping up with (DEQ) regulations and tries to keep abreast of all regulations coming into the different states. We are a member of many industry-related organizations and we receive numerous publications that keep us abreast of government actions that affect our industry.

I did attend the Stage II meeting on August 29, 1990. And I was surprised at the difference of opinion on the best solution to the "Stage II" problem. When the meeting adjourned, I felt there was an agreement that the best solution was the second alternative.



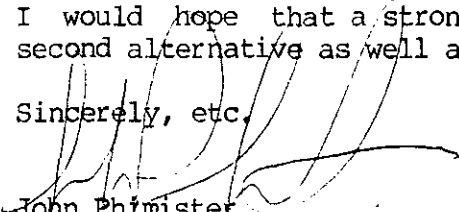
I am sorely disappointed that the department has recommended the third alternative. I think we will see a lot of shoddy work and a lot of people who cannot meet the date of December 31, 1991 and still comply with the UST regulations.

Small businesses will need some sort of way to get a temporary waiver for up to one year so that compliance can happen without their being cited as a "violator" of the regulation. Maybe it could be set up so that there are built-in delays for small companies of up to one year.

In addition, we would strongly recommend that the board propose tax credits or a funding mechanism to assist with the expense of the Stage II compliance.

I would hope that a strong consideration is given to the second alternative as well as the above comments.

Sincerely, etc.



John Phimister  
Liaison Assistant  
Western Stations Co.

JP/ln

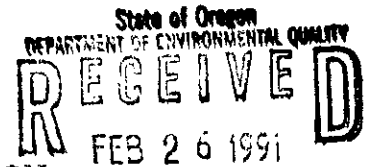
Certified

Astro Western  
Companies

Western Stations Co  
Western Hyway Co  
Astro Management Co.

P.O. Box 5969 • 1466 N.W. Front Ave • Portland, Oregon 97228-5969 • (503) 243-7899 • Fax (503) 243-7874



**OREGON GASOLINE DEALERS ASSOCIATION**

6700 S.W. 105TH ST.  
BEAVERTON, OREGON  
646-5404

**AIR QUALITY DIVISION**

FEBRUARY 25, 1991

State of Oregon  
Department of Environmental Quality  
Air Quality Division  
811 S.W. Sixth Avenue  
Portland, Oregon 97204

**Regarding: STAGE II VAPOR RECOVERY  
WRITTEN TESTIMONY**

Position Statement:

The Oregon Gasoline Dealers Association opposes the Department of Environmental Quality's decision to implement Stage II Vapor Recovery Regulations in Multnomah, Washington and Clackamas counties. The cost to small business is too great a sacrifice to create a "growth cushion" for the Portland/Vancouver Air Quality Maintenance Area.

Rational:

To quote from the "Request for E.Q.C. Action", dated December 14, 1990--Page 3--under the heading of "Regulate/Affected Community Constraints/Considerations:

*"The Stage II Vapor Recovery requirements are not required by the Clean Air Act of 1990 and are not proposed as part of the State Implementation Plan; this approach allows the state to use Stage II emission reductions for growth cushion as needs arise, as well as for attainment and maintenance of ozone standards."*

The financial impact on the tri-county area will most assuredly surpass TEN MILLION DOLLARS just for the construction costs of implementation, let alone the ongoing maintenance costs to business.

A recent letter from the United States Small Business Administration to E.P.A reads in part: "*The financial burden of the Stage II controls would impose a large financial burden on gasoline marketers. This would occur at a time when they are struggling under an onslaught of other environmental rules; community Right-To-Know regulations, small quantity generator rules and most significantly the Underground Storage Tank rules. Compliance with the UST rules alone, including technical standards, corrective action and financial responsibility, raise serious financial concerns for the mid-size and small marketers.*"

The SMALL BUSINESS GASOLINE MARKETERS in the Tri-County area are already reeling from the UST technical and financial responsibility regulations. The marketer cannot find the required ONE MILLION DOLLARS worth of financial responsibility insurance unless they replace their tank systems. The average cost of this replacement is \$75,000 to \$100,000 of capital investment. Even with the State Loan Program in place, it is next to impossible to find anyone in the banking community to loan money to small business, even when the business is credit worthy, due to the risk of the property becoming contaminated. The banking community has become extremely conservative in the loans that they are granting due to the problems they have within their own community and the ever tighter loan regulations by the government.

The need for the SMALL BUSINESS GASOLINE MARKETER to survive is paramount to keep competition alive, especially in the Tri-County area. We are seeing more and more large refiner owned stations being taken back from the lease dealer and "company operated", we are seeing less and less brands available to compete in the Portland metropolitan area, and that trend will continue as the oil companies "segment" the gasoline market for higher and higher market share.

The SMALL BUSINESS GASOLINE MARKETER will find that the investment money needed, if it can be found, will cost much more than the large oil company or large jobber will have to pay. The SMALL BUSINESS GASOLINE MARKETER will be at an extreme disadvantage when trying to find competent, experienced contractors, as the large oil companies and large jobber companies will have more economic power in hiring these companies

The cost of maintenance of Stage II equipment will put further strains on what profits are available on the marketing of gasoline in the Tri-County area. Surveys done by the Southern California Service Station Dealers Association have shown a yearly maintenance cost on an average station to be close to \$6,000.00 a year. The cost includes, of course, the cost of replacing hoses and nozzels due to wear and tear, the investment in keeping these supplies "in stock" so that the pump can be kept in service at all times. The increase in fueling time from an average of 3 minutes to 4 minutes per car, the time required to do at least daily inspections of the apparatus, the paperwork associated with those inspections, and the possible penalties imposed for not having those hoses and nozzels in compliance.

The Oregon Gasoline Dealers Association therefore

PROPOSES to the Department of Environmental Quality that

ALL GASOLINE MARKETERS WITH 3 (THREE) OR LESS SERVICE STATION SITES BE EXEMPT FROM STAGE II VAPOR RECOVERY IMPLEMENTATION REGULATIONS UNTIL SUCH TIME AS EACH OF THOSE SITES IS UPGRADED TO COMPLY WITH THE TECHNICAL STANDARDS OF THE UNDERGROUND STORAGE TANK REGULATIONS. IF THE STATION IS ALREADY IN COMPLIANCE, AND HAS THE UNDERGROUND PIPING IN PLACE FOR STAGE II, COMPLIANCE WOULD GO INTO EFFECT AS IS PROPOSED UNDER THE PLAN ENACTED BY D.E.Q. IF USTs HAVE ALREADY BEEN UPGRADED AND ARE IN COMPLIANCE WITH THE UST TECHNICAL REGULATIONS BUT DO NOT HAVE UNDERGROUND PIPING FOR STAGE II IN PLACE, THAT THOSE MARKETERS BE GIVEN 3 YEARS TO INSTALL STAGE II VAPOR RECOVERY EQUIPMENT BOTH BELOW GROUND AND ABOVE GROUND.

D.E.Q needs to be responsive to the economic impact Stage II will have on small business in the Tri-County area as well as the entire State of Oregon. We need sufficient time to formulate good public policy that will address the survival of the backbone of the Oregon economy..... the small business owner as well as keep Oregon's environment clean and safe for all of our futures. .

Page 4

Please call me if I can be of any assistance in further background-  
ing you on the seriousness of the economic impact on our small  
business community or in any other way.

Respectfully submitted,



Peggy Manning

of

Peggy Manning and Associates

Consultant on Environmental Issues  
to the Oregon Gasoline Dealers Assoc.

6700 S.W. 105th St.

Suite 100

Beaverton, Oregon 97005

646-3693

**ARCO Products Company**

1055 West Seventh Street  
 Post Office Box 2470  
 Los Angeles, California 90051-0570  
 Telephone 213 486 8258

James S. White  
 Manager  
 Environmental Legislation and Regulation

February 22, 1991

Mr. Meryn L. Hough  
 Air Quality Division  
 OR Department of Environmental Quality  
 811 SW Sixth Avenue  
 Portland, OR 97201



State of Oregon  
 DEPARTMENT OF ENVIRONMENTAL QUALITY

RECEIVED  
 FEB 25 1991

Facsimile

**AIR QUALITY DIVISION**

**Re: Proposed Stage II Vapor Control Regulation**

Dear Sirs:

Atlantic Richfield Company (ARCO) is a major supplier of gasoline to the State of Oregon (OR) and we appreciate the opportunity to contribute comments relative to the implementation of a Stage II vapor control program in the OR counties of Multnomah, Washington, and Clackamas. We understand that the most currently proposed rollout schedule is as follows for gasoline outlets (GOs) that have throughputs in excess of 600,000 gallons per year:

Rollout Trigger	Deadline
<u>Tier 1:</u> + 150,000 gal/mo	12/31/91
<u>Tier 2:</u> + 90,000 gal/mo	12/31/92
<u>Tier 3:</u> + 50,000 gal/mo	12/31/93

Although ARCO supports the implementation of a Stage II program in OR, we have serious concerns about the manner in which the program is proposed to be implemented. To begin with, the compliance dates are extremely tight. An extra four months should be allowed for the first and second tiers of the rollout. The DEQ should not have a schedule a rollout that would require contractors to hire inexperienced work force. Past experience has shown that such inexperienced contractor workers are not reliable with regard to proper installation. There may also be a problem in obtaining Stage II equipment. Las Vegas, Reno, ozone "attainment" areas in CA and the neighboring state of WA are all in the process of developing or implementing Stage II programs. This will place an unprecedented amount of demand on the manufacturer's of Stage II equipment that may be difficult to meet. This accelerated demand will most likely lead to price increases if the demand is substantial and prolonged exacerbating the net financial effects of this requirement on those required to install the equipment first.

A rollout based on throughput is not equitable. Such a program would bring about imbalances in the marketplace and may place a further strain on available resources. If the intent of such a rollout is to allow additional time for smaller independents to install the Stage II controls, the DEQ should be advised that there are independents that have throughputs greater than 90,000 gallons per month and a few with throughputs in excess of 150,000 gallons per month. This intent can be more equitably and effectively be accomplished by the following:

- 1st Tier: Owners of 5 or more GOs install Stage II on one third of their GOs by the deadline by 04/30/92.
- 2nd Tier: Owners of 5 or more GOs install Stage II on two thirds of their GOs by the deadline by 08/31/93.
- 3rd Tier: All GOs not otherwise exempt from Stage II requirements must install Stage II by the deadline by 12/31/94.

Page Two

Mr. Mertyn L. Hough  
February 25, 1991

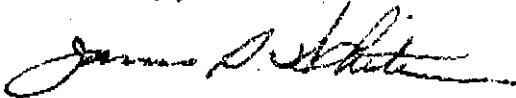
We will endeavor to seek whatever information we can access that may indicate the number of GOs in the compliance area are independently owned to assist you in your further evaluation of this counterproposal.

Even with the suggested extensions, the rollout schedule may prove to be too tight. There should be a specific waiver from the compliance schedule if the GO owner can demonstrate a good faith effort to comply with documentation including work orders/contracts and purchase orders for equipment. We understand that the DEQ already has a waiver process in place but for a program of the scope of the Stage II program, this process may need to be somewhat streamlined to avoid unintentional noncompliance.

If the OR DEQ is going to mandate a Stage II program it is essential that the DEQ maintain an adequate staff to inspect GOs and enforce the requirement. The DEQ should maintain an adequate number of adequately trained inspectors to assure continued compliance. Without continuing enforcement, Stage II programs are ineffective.

ARCO thanks you for the opportunity to deliver verbal testimony and the aforementioned written comments on this issue of Stage II vapor controls. I would be happy to answer any questions you may have regarding our comments (either verbal or written)

Sincerely yours,

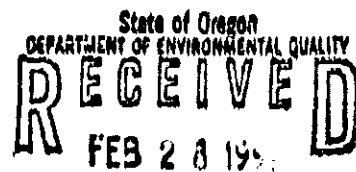


James S. White

JSW/mac

**ARCO Products Company**

a Division of Atlantic Richfield Company

**Facsimile Transmission**

Date: February 28, 1991

From: James S. White

City: Los Angeles

FAX Number: 213/486-8226

Office: ARCO, PAC-1157

State: CA

Phone Number: 213/486-8258

To: ~~Merlyn Hough~~ FAX: 503/229-6124

The attached is per our conversation regarding the potential impacts of the ARCO Stage II rollout proposal. I was not able to obtain information that was any more detailed than what you see on the attached. We could make some assumptions and extrapolations but I don't think that we can zero in on an exact number for the ARCO proposal. It should, however, be very apparent to you that ARCO and its contract dealers, that own their own gasoline dispensing outlets (GDOs), would be very differentially effected by the OR DEQ rollout program. Obviously, ARCO and its leasee dealers (ARCO owns their GDOs) are not going to suffer a great deal but our contract dealers will.

If you stay with the throughput as a rollout mechanism, ARCO recommends that you lower the first tier trigger to 100,000 gal/mo and the second tier trigger to 85,000 gal/mo. This would place the burden of installing Stage II more evenly among the various competitors in the marketplace.

Page One of Two

JSW/mac

**Portland, OR GDO Statistics**

TP = 1,000 gal	Actual GDOs	Total TP All GDOs	Ave TP per GDO	Mkt Share
ARCO	60	8764	140 <sup>1</sup>	24%
BP	61	6628	109	18%
Chevron	56	6408	112	17%
Shell	47	2149	46	6%
Texaco	79	6957	85	19%
Unocal	31	2039	64	5%
Non Major	<u>87</u>	<u>4046</u>	<u>49</u>	11%
Total	102	36991	90	-
Majors	334	32945	96	89%

Source: Whitney Leigh, 08/90 [For permission to use their data in public arena . . . 918/492-4140]  
 1. ARCO's average OR GDO actually does over 200K gal/mo

Rollout Proposals . . .			Percent of Total TP Controlled by Stage II	
			OR DEQ Proposal	ARCO Proposal 2
1st yr	ARCO	8764	24%	30%
2nd yr	BP	6628		
	Chevron	6408		
	Texaco	6957	78%	77%
3rd yr	Shell	2149		
	Unocal	2039		
	Non Majors <sup>3</sup>	2023	92%	92%

- 2. These rollout calculations ~~falsely~~ assume that all branded GDOs are owned by the major oil companies:
  - There are a total of 70 ARCO branded GDOs (plus 18 distributor owned GDOs)
  - ARCO only owns 42 GDOs and the other 28 are dealer owned GDOs
  - ARCO would only be responsible for installing Stage II on 42 GDOs
- 3. Assume 50% are >50K gal/mo & <90K gal/mo and do not own more than 5 GDOs

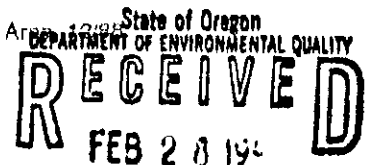
**St. Louis, MO Experience**

	Actual GDOs	Percent of Total	Percent Maj + Ind
Majors	433	34%	45%
Independents	535	43%	55%
Govmnt	82	7%	
Private	<u>196</u>	16%	
Total	1246		

- 1 1/2 yrs to implement for all GDOs [05/01/86 to 12/31/87]
- Jobber costs per GDO were consistently less than for the majors
- 90 GDOs closed due to Stage II requirement

Cost to install Stage II: From Scratch . . .		With UST Improvements . . .
6 nozzles . . .	\$15K to \$17K	\$16K
18 nozzles . . .	\$30K to \$34K	\$30K
36 nozzles . . .	\$60K	\$51K

Source: API Survey of Actual Stage II Implementation Costs in the St. Louis Metropolitan Area, 1985  
 State of Oregon DEPARTMENT OF ENVIRONMENTAL QUALITY







**Chevron U.S.A. Inc.**

575 Market Street, San Francisco, California  
Mail Address P.O. Box 7006, San Francisco, CA 94120-7006

November 19, 1990

Mr. Del Fogelquist  
Western States Petroleum Association  
2201 6th Avenue, Suite 1105  
Seattle, Washington 98121

Oregon Stage II

Dear Del,

Enclosed for your information is a copy of the Oregon DEQ staff report on Stage I and II vapor recovery.

The implementation schedule calls for phased-in installation of Stage II vapor recovery systems at the largest service stations by 12-31-91. Smaller stations, with throughputs down to 50,000 gallons per month, will join the program over the following two years.

The DEQ staff has drafted the enclosed report for the December 14, 1990, EQC meeting to request the Commission to authorize a public hearing on this proposal early next year. Staff expects the rule to be considered and adopted by April 1991.

I talked to Merlyn Hough about the report and suggested some changes to the proposed rule in Appendix A. Some highlights of our conversation:

402 (4) - Petroleum liquids other than gasoline should not be considered when determining service station throughput.

402 (6) - The definition of "Stage I" needs to be clarified.

404 (1)(a) - Consider making the driver responsible for proper connection of the Stage I system during delivery. The concept of requiring a "system" to assure that the vapor line is connected before transferring gasoline is impractical.

The Department needs to formalize the concept of using CARB certification as the criteria for Stage I and II installations. As presently written in Section 340 (6), Fire Marshalls, Weights and Measures sealers and safety personnel could require separate approval of each service station installation.

I mentioned to Merlyn that the compliance dates were extremely tight and that some extra time for at least the first two tiers of stations (150k+ and 150k to 90k) should be considered. I suggested that an extra four months could be granted without causing any ozone exceedances. He said that we should bring up that point at the public hearing.

Please give me a call concerning coverage for the EQC meeting in Portland on December 14.

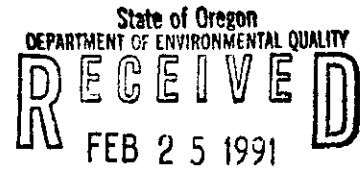
Yours truly,



Donald Gilson

DFG:ssst

Enclosure



**AIR QUALITY DIVISION**

February 21, 1991

State of Oregon  
Department of Environmental Quality  
811 S.W. 6th Avenue  
Portland, Oregon 97201

ATTN: MERLYN L. HOUGH, P.E.

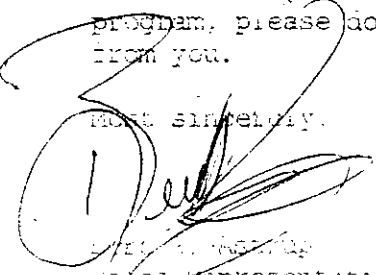
Dear Merlyn:

I appreciate the opportunity of attending the public hearing on Stage II Vapor Recovery.

I was surprised that no testimony was given from any service station operators or dealer associations. As I mentioned to Mr. Coiffer, maybe these people have succumbed to their fate. I wonder what will happen to your program if the total compliance date of October, 1991 is not achieved. I personally do not think it will.

Again, Mr. Hough, the meeting was well done. If Tank Liners, Inc. can offer any assistance to you as you develop your compliance program, please do not hesitate to ask. I look forward to hearing from you.

Best sincerely,



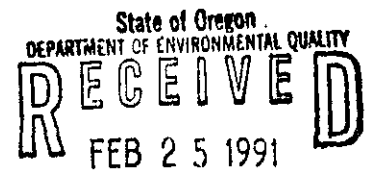
David J. Hough  
Sales Representative

ERA: jml



## Multinational Business Services, Inc.

11 Dupont Circle  
Washington, D. C. 20036  
U. S. A. (202) 293-5886  
Fax: (202) 939-6969



**AIR QUALITY DIVISION**

Regulatory and Trade  
Counsellors

February 22, 1991

Mr. Merlyn Hough  
Air Quality Division  
Dept. of Environmental Quality  
811 S.W. Sixth Avenue  
Portland, OR 97204

Dear Mr. Hough:

We are submitting this data and comments in connection with the public hearing on control of vapors from gasoline dispensing stations (amendments to OAR 340, Division 22).

Multinational Business Services, Inc. is an independent company that specializes in regulatory analysis. It has been extensively involved in analysis of gasoline refueling control issues since 1986.

We are enclosing an educational VHS videotape on Stage II controls. The tape, which was produced in mid-1989 and updated in the Fall of 1990 (just before amendment of the Clean Air Act) uses animation and live footage to show how Stage II and Stage I controls work, how the equipment has been improved in recent years, and what is involved in installing the controls in service stations. We can make available extra VHS copies (large numbers may require a charge to cover duplication costs and handling) or duplicate masters that can be used for editing into short public service announcements.

I understand that some testimony has been received to the effect that Stage II controls do not make sense because onboard systems will control the same refueling vapors within a few years at no cost, and that the government may be considering retrofitting vehicles with the controls. This is not accurate.

- The Clean Air Act Amendments of 1990, section 202, amended EPA's statutory authority to require onboard controls. The amended provisions state that if onboard regulations are promulgated, they will apply to "new light-duty

### The Multinational Companies

Multinational Business Services	Hamburg (40) 220-4277
Multinational Legal Services	11 Dupont Circle Washington, D. C. (202) 797-7124
Multinational Investment Services	11 Dupont Circle Washington, D. C. (202) 797-6353

vehicles" beginning in the fourth model year after promulgation of regulations requiring the controls, and that a three-year phase-in will take place after that.

- An onboard control program can be implemented only at the rate that new vehicles with the controls replace existing vehicles that are in use. We have recently prepared a chart showing the rate at which this "fleet turnover" would occur over time under the 1990 Amendments, and it is attached. As you can see, even after almost twenty years, onboard control would not control more than approximately fifty percent of the gasoline throughput.<sup>1</sup>
- At this time the safety consultation between EPA and DOT regarding onboard controls is proceeding as required by the 1990 Amendments. If safety concerns continue to be significant, onboard control requirements might not be promulgated at all.
- So far as we know, neither EPA nor any other agency has given any consideration to retrofitting of existing vehicles with onboard controls. This is not authorized by the statute, and it would almost certainly be technologically infeasible and tremendously expensive. The structural and functional complexity of onboard controls is often underestimated by those who are not familiar with their theoretical operation and the problems that have been exhibited by prototype designs.
- Onboard controls would involve substantial new hardware and functional complexity that obviously cannot be obtained free of cost. Detailed cost estimates by consulting firms made prior to the 1990 Amendments indicated an initial average cost of \$80 (1986 dollars) per vehicle, declining to an average

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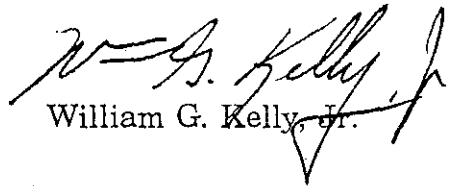
<sup>1</sup> This projection is based on the assumption that onboard controls are only authorized for "light-duty vehicles", as stated in the 1990 Amendments. "Light-duty vehicles" has been defined to include only passenger cars, and not light-duty trucks and heavy-duty vehicles. However, some legislative history indicates that some members of Congress intended light-duty vehicles to include light-duty trucks. We are assuming this legislative history will not be sufficient to modify the ordinary meaning of "light-duty vehicles". The figure assumes a maximum of 90 percent effectiveness for onboard systems because it takes into account the degree to which malmaintenance, defects, deterioration, and tampering would be likely to reduce effectiveness from the 95% minimum required by the statute.

of \$37 per vehicle after seven years, with the cost for some vehicle models in the hundreds of dollars.<sup>2</sup>

We are also enclosing more detailed data and explanations of Stage II controls and onboard controls contained in two papers we have prepared, entitled "Stage II Refueling Controls for Ozone -- Summary" (February 1991) and "Technical Background on Stage II Controls" (February 1991). Some of the cost data in these papers may be slightly outdated because it was estimated several years ago and has not been adjusted for inflation.

Please feel free to contact us if you want clarification of any of the comments provided here or additional supporting data.

Sincerely,



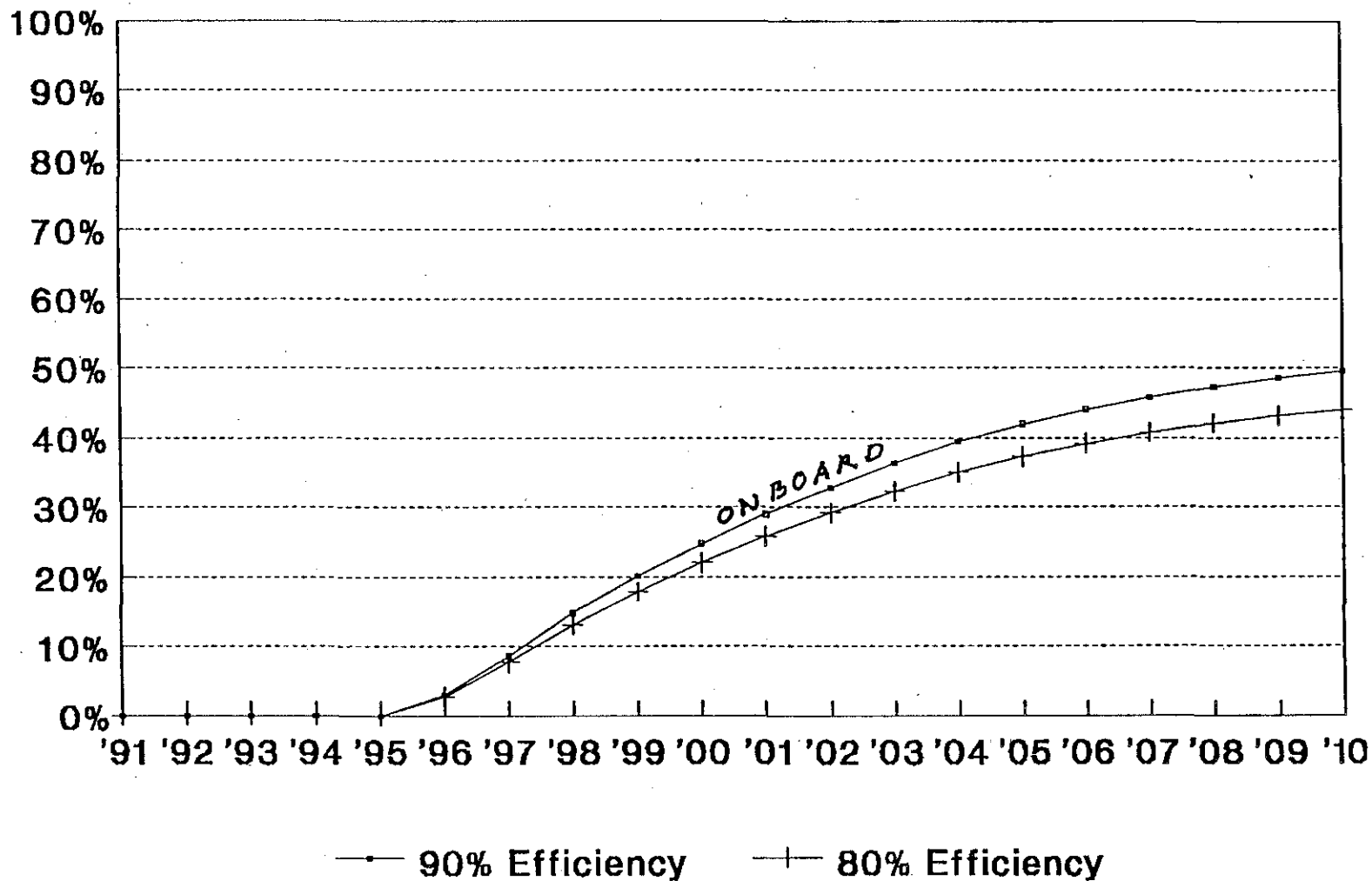
William G. Kelly, Jr.

Enclosures

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<sup>2</sup> Mueller Associates, Inc., "Onboard Refueling Vapor Recovery System Cost Study" (1987) (Reproduced as Appendix E in Multinational Business Services, Inc., "Costs and Cost-Effectiveness of Stage II and Onboard Refueling Vapor Controls" (1987)).

## Percent Of Gasoline Throughput Controlled By Onboard And Stage II Controls Over Time



Source: Data derived from The Motor Fuel Consumption Model: Fourteenth Periodical Report prepared by Energy and Environmental Analysis, Inc. for the Department of Energy. The complete methodology used may be obtained from MBS upon request.

February 1991

**STAGE II REFUELING CONTROLS FOR OZONE -- SUMMARY**

- o Stage II controls capture gasoline vapors expelled from vehicle fill pipes during refueling and route them to the service station's underground storage tanks. These controls are an important measure for controlling hydrocarbons that contribute to harmful atmospheric ozone.
- o Stage II programs are in place in California, Massachusetts, New Jersey, the New York and St. Louis metropolitan areas, the District of Columbia, Philadelphia, and partially in Wisconsin. Fairfax County, Virginia, has an ordinance that has not yet been implemented. Several other areas have regulations under development.
- o A Stage II program should ordinarily achieve between 80%-92% effectiveness in controlling refueling emissions. The effectiveness in a particular area will depend on the frequency of enforcement inspections and the exemptions for smaller stations.
- o Installation costs depend on the size of the station: Total cost goes up with the size of the station, while the cost on a per nozzle basis declines. Installation at a six-nozzle station has been estimated (1987) to cost between \$10,000 and \$12,000; for a fifteen nozzle station, between \$18,000 and \$23,000. Higher costs have been reported recently in New York and New Jersey, apparently due in some part to compressed implementation schedules that resulted from litigation.
- o Maintenance/replacement costs are roughly \$130-\$200 annually for each nozzle/hose unit. Equipment prices may decline as the market expands.
- o Costs are offset to a significant extent by the savings realized through the gasoline conservation effects of the Stage II controls. Savings can also be achieved through coordination with a program for replacement and repair of underground storage tanks (known as an "UST" program).
- o Cost/effectiveness estimates have ranged roughly between \$530/ton and \$1,200/ton of emissions removed. This is considered very cost/effective relative to other available ozone control measures.
- o The latest Stage II nozzles and hoses are significantly more user-friendly than earlier hardware and require little effort.
- o Refueling controls installed on vehicles (called "onboard" controls), even if they were eventually required by the



federal government, would not be a substitute for Stage II controls. These controls can only be implemented at the rate that new cars are sold (following four years of leadtime for design and production ), and, if the controls are required, it will be twenty years before the controls achieve their full effectiveness potential. Since the controls would apparently be installed only on passenger cars ("light duty vehicles"), their ultimate effectiveness would not be more than about fifty percent of gasoline throughput. Safety concerns may prevent the issuance of any onboard requirements.

More detailed data on these and other points is provided in the attached paper entitled "Technical Background on Stage II Controls".

February 1991

### TECHNICAL BACKGROUND ON STAGE II CONTROLS

Stage II controls (often called "Phase II" in California) are designed to capture gasoline fumes that are expelled from vehicle fill pipes when they are refueled. When a vehicle enters a service station for refueling, a portion of its tank contains liquid gasoline and the remainder of the tank contains gasoline vapors. When the tank is refilled, the vapors are displaced from the tank, and, in the absence of Stage II controls, they disperse into the atmosphere. These gasoline vapor refueling emissions are hydrocarbons which have been determined to contribute to the formation of harmful low-level (or "tropospheric") ozone (as distinct from high-level, or stratospheric, ozone, which is beneficial).

Most current Stage II control designs (called "balance" systems) consist of a flexible "boot" on the nozzle spout that fits tightly against the fill pipe opening, a special nozzle, a double-walled (or "coaxial") hose, dispenser piping, and underground piping to the station's underground storage tanks. When gasoline is pumped into the vehicle, the vapors are expelled from the tank, captured by the boot, and routed through the nozzle and piping to the station's underground gasoline storage tanks.

The vapors remain in the underground tanks until they are refilled and a similar type of vapor-recovery operation is performed (called "Stage I" vapor recovery). The Stage I system routes the vapors from the underground tank into the tank truck, which returns them to the refinery or tank farm, where they are liquified or burned. Most areas already have Stage I control programs. Stage I and Stage II controls operate independently of each other, and the effectiveness of one does not depend on the use of the other. One way to explain this last point is that there will always be vapors filling the empty space in the underground tanks, even if Stage II controls are not in use, and thus Stage I controls will always recover a volume of vapors equal to the empty space in the tank; but if Stage II controls are in use, the vapors filling the empty space are vapors recovered from vehicle fuel tanks, rather than vapors that evaporated from the gasoline in the underground tank. Another way to explain it is that without Stage I controls and Stage II controls, vapors from the vehicle fuel tanks will be expelled plus a vapors from the underground tanks; while if Stage II controls are is use but Stage I controls are not, no vapors are expelled from the vehicle fuel tank to the atmosphere and the same volume (i.e., the same as when there were no Stage II controls) of vapors is expelled from the underground tanks. (In other words, the vapors from the vehicle take the place of vapors that would be created in the underground tank through evaporation.)

Some Stage II systems utilize turbines or venturi devices to augment the natural pressure differential that pushes/pulls the vapors into the underground tanks. These systems are usually called "vacuum assist" systems. An advantage of these systems is that they do not require a seal between the nozzle boot and the fill pipe, and as a result the nozzle can have a boot which requires no compression. One type of vacuum assist system, that Amoco has recently put into use at some of its stations, utilizes a coaxial nozzle spout without a boot. On this system, the vapors are drawn in through holes in the outer sleeve of the spout. A potential disadvantage of vacuum assist systems is that they can cost more and require more maintenance than balance systems. However, these disadvantages may be offset, at least partially, by the advantages of reduced maintenance on the nozzle boot and boot interlock mechanism and greater convenience.

#### Implementation Status

- o Stage II controls are already in place in the major urban areas in California, the New York metropolitan area (four counties), the entire State of New Jersey, the St. Louis, Missouri, metropolitan area (five counties), and the District of Columbia. Wisconsin requires the controls on large stations.
- o California is now extending its Stage II program to the remainder of the State. All remaining areas of the State have enacted Stage II requirements.
- o Massachusetts and the City of Philadelphia have issued final Stage II regulatory requirements.
- o Stage II regulatory requirements are expected before long in Pennsylvania, Connecticut, southeastern Florida, and the Seattle, WA, Portland, OR, and Albuquerque, NM metropolitan areas.

#### Clean Air Act Amendments of 1990

- o The Clean Air Act Amendments of 1990 require Stage II controls in all "moderate" and worse ozone nonattainment areas. The provision in the Amendments regarding Stage II controls provides that the requirements for moderate areas will not apply if regulations requiring onboard controls are issued, and that the requirements for other areas may be waived by EPA after it determines that onboard controls are in widespread use.
- o The onboard provision requires EPA and the Department of Transportation to consult regarding the safety of onboard controls. It is not completely clear from the language of the Amendments and their legislative history whether onboard

regulations must be issued if the agencies determine that onboard controls pose significant safety risks. (For example, section 202(a)(4) states that no emission control system may be used if EPA determines that it poses an unreasonable risk to safety, after considering whether alternative types of controls could achieve emission control objectives without similar safety risks.)

- o If onboard controls are required, the Amendments require them to be installed only on new cars beginning in the fourth model year after promulgation of the regulations, and then a three-year phase-in period is provided for. In addition, any requirements apparently could apply only to light-duty vehicles, which would not include light-duty trucks or heavy duty gasoline vehicles (although one of the Congressional committee reports suggests that light-duty trucks would be covered). The attached Figure 1, prepared by MBS, shows the percentage of gasoline throughput that would be controlled over time by onboard systems under these provisions.

#### Effectiveness

- o EPA has estimated that uncontrolled refueling emissions average about .01 pound per gallon, or about one pound for every hundred gallons of gasoline dispensed. In a metropolitan area the size of Baltimore or Philadelphia, over 2.5 million gallons of gasoline are dispensed each day. This produces over 12 tons of refueling vapors each day. In larger metropolitan areas such as Chicago, refueling emissions may be over 40 tons per day. In many areas, Stage II controls would have the most impact, and be the most cost/effective, of the remaining control options, and by themselves could bring the area into attainment.
- o In its August 1987 notice of proposed rulemaking for onboard controls (52 Fed.Reg. 31162, Aug. 19, 1987), EPA included a chart showing a range of effectiveness for Stage II controls with 66% as the upper bound and 48% as the lower bound. (Figure 4, at 31179) Those estimates drew criticism from State officials and the private sector for being based on obsolete data and being misleading in the way they were presented.
- o EPA has approved Stage II programs based on 91.5% effectiveness for the St. Louis, Missouri, metropolitan area and 86% for the State of New Jersey.
- o EPA's upper-bound estimate (66%) assumed an enforcement program with annual inspections; the lower bound (48%) assumed essentially no effective enforcement (termed "minimal" enforcement) based on experience with the program in the District of Columbia before the District adopted a civil

- enforcement program. Thus, at the outset it is apparent that the lower bound is not relevant to any program that would include a reasonable enforcement program. (The District now has an effective enforcement program.)
- o To arrive at its upper-bound 66% in-use effectiveness estimate, EPA started by assuming the effectiveness of well-maintained Stage II equipment to be a minimum of 95%. This assumption is consistent with the certification requirements in California. (All Stage II equipment currently on the market has been certified under the California standards.)
  - o EPA then assumed that the basic in-use effectiveness of a Stage II program would be 86% with annual enforcement under a federal program. (In-use effectiveness takes into account losses in program effectiveness due to improperly maintained or malfunctioning equipment. EPA's 1984 gasoline marketing study contained an estimate of 88% effectiveness for state programs with annual inspections.) This estimate was based on compliance data from the California programs prior to 1982. New Jersey's 86% effectiveness estimate was based on this figure.
  - o Finally, EPA assumed that exemptions for smaller stations would reduce program effectiveness by 23% (bringing program effectiveness down to 66%). This estimate appears to have been based on 1977 data on size distribution of the service station population. It also assumes the exemption levels that would be required if federal Stage II regulations were required (under 50,000 gal./mo. for independents - see sec. 324 of the Clean Air Act).
  - o The EPA effectiveness estimates have been criticized on the basis that more recent (i.e., post-1982) California compliance data shows that a program of annual enforcement inspections can achieve above 88% effectiveness (before considering exemptions), and a program with more frequent inspections can achieve effectiveness of 92% (again, without considering exemptions). For example, in 1986 EPA participated in a joint study with the California Air Resources Board which determined that net in-use effectiveness of the Stage II program in California's South Coast, which utilized an average of two inspections per year, was well over 90%.
  - o The exemptions factor portion of the EPA estimates (23% reduction in effectiveness) has also been criticized as being based on obsolete service station size distribution data (i.e., data on the proportion of the station population that falls into various size categories). Multinational Business Services and Sierra Research have presented more recent data indicating that the size exemptions assumed by EPA would result in far less of an effectiveness reduction than 23%.

Sierra estimated a reduction of approximately 6% on average for urban areas. In addition, there is a strong trend of attrition among small stations that is forecast by analysts to continue.

- o The size exemptions that have been granted to date in Stage II programs have varied between 0 to 10,000 gal./month in California, New Jersey, St. Louis, and the District of Columbia. New York has exempted all stations (except new ones) that pump under 250,000 gal./ year, and Massachusetts is exempting stations pumping under 20,000 gal./mo.
- o The EPA effectiveness estimates also do not take into account recent improvements in equipment. Boots on some of the new generation nozzles are more durable because they are made from Dupont Hytrel (the Emco Wheaton 4000 series, which appears to currently dominate the market); every year there are fewer cars on the road with fill pipes under the rear license plate (a frequent cause of torn boots); and both nozzles and hoses have become more lightweight and user-friendly, lessening the likelihood of consumer abuse of the equipment. As the Stage II market expands, it can be expected that it will grow even more competitive, and the competition and higher volumes of sales will stimulate further improvements in durability and convenience. For example, Amoco has been experimenting with a "bootless" Stage II system; Goodyear has begun marketing a new version of its Maxxim coaxial hose with a venturi splashback extractor system; Gilbarco is marketing a hose-end venturi that is attached to the dispenser end of the hose rather than the nozzle end; Emco Wheaton is about to introduce a version of its 4000 series nozzle that includes a vapor vent valve (previously it had to be installed on the dispenser end of the hose); and OPW and Husky are expected to introduce soon new lightweight nozzles to compete with the Emco Wheaton 4000 series.
- o In summary: The EPA upper-bound estimate presented in its notice of proposed rulemaking for onboard controls was not a true upper bound. A State program with two annual enforcement inspections and minimal exemptions should be able to achieve approximately 92% effectiveness. A program with annual and non-compliance follow-up inspections coupled with the generous exemption levels assumed by EPA (as required for a federal program) should achieve effectiveness of over 80% in most urban areas. For any particular area, the effectiveness reduction due to exemptions will depend on the exemptions granted and the exact service station size distribution for that area. These effectiveness levels are likely to rise as the equipment, enforcement, and consumer education improve further.

- o In addition to controlling refueling emission from the vehicle fill pipe, Stage II controls reduce emissions from the vent pipes for the underground tanks. This is achieved by means of the recovered vapors maintaining pressure equilibrium in the tanks, which reduces the intake of fresh air when gasoline is pumped. The reduction of additional fresh air being drawn into the tanks inhibits the evaporation of gasoline and expulsion of the vapors from the vent pipes due to differences in partial pressure and variations in barometric pressure. (These are termed emptying and breathing losses.) The exact extent of these emissions and the extent to which they are suppressed by Stage II controls have been questioned by some parties. In its proposed rulemaking, EPA assumed that emptying losses were 120 mg per liter and that Stage II controls would reduce them by one-half. California submitted comments on the EPA proposed rulemaking in which it contended that its tests have shown that Stage II control of breathing and emptying losses is higher than assumed by EPA.
- o California officials have conducted two surveys of gasoline spillage at stations with Stage II controls. Both times they concluded that spillage was less with Stage II controls than with conventional systems. The State is now engaged in a more extensive study of the issue. The American Petroleum Institute recently sponsored a study by EA Mueller on this subject. The API/Mueller study concluded that Stage II controls increase drips and spills by .09 gram per gallon. This translates roughly to a 2% loss in effectiveness. It should be noted, however, that this study was conducted in the District of Columbia, where instructions are not posted and there has been little attempt to inform consumers, and a significant number of the stations did not have equipment of current design. It is arguable that stations with older equipment tend to spill/drip slightly more because, for example, customers tend to point the nozzles more toward the ground due to their weight and fumble more with the nozzles when they have difficulty keeping them locked in place (or do not know that they can keep them locked in place).
- o Critics of Stage II controls sometimes point out that there is a warning printed on the nozzles that warns users to wait several seconds before withdrawing the nozzle after pumping, and few if any do so - the implication being that a great deal of effectiveness is thereby lost. However, this portion of the warning is no longer applicable. It was originally required when the nozzles required a higher shut-off pressure (between one and two PSI, or between 27 and 55 water column inches of pressure). Subsequently, the California certification requirements were modified to require shut-off to occur with no more than eight water column inches, plus or minus two. This eliminated the problem of spitback. With regard to effectiveness, Stage II nozzles incorporate a vapor

valve that prevents vapors from leaving the system through the nozzle once the nozzle shuts off. Therefore, there can be no loss of effectiveness due to a failure to wait before withdrawing the nozzle.

- o With regard to the Emco Wheaton 4000 series nozzles, the third-generation nozzle that currently dominates the market, some critics point to the stiffness of the boot as indicating that the nozzle will be difficult to use. It should be known that these nozzles use a material for the boot, Dupont Hytrel, that reacts with gasoline vapors to become more pliable as it is used. Within about a week of being put in use, the insertion pressure required for a 4000 series nozzle drops from 17-19 pounds to about 10-12 pounds. (OPW nozzles use a urethan material that is stable with regard to pliability - i.e., it does not become more pliable through reaction with vapors.)

Cost

- o Installation (or capital) costs include the costs for the new hoses and nozzles; trenching through the existing pavement to install the underground piping and connections, and repaving; and modifying the dispenser piping for the vapor return lines. Maintenance costs are basically the costs of replacing torn nozzle boots, and worn-out nozzles and hoses. The underground piping and dispenser piping does not require any maintenance and has a lifetime at least equal to the average lifetime of a station.
- o The most recent independent empirical data on installation costs gathered by an independent source appears to be the St. Louis contractor bid data analyzed by Radian Corp. in 1986 and 1987. Radian conducted the study for Multinational Business Services, Inc., ("MBS") which was investigating Stage II and onboard costs under a grant from MVMA and AIA (the two automobile manufacturers' associations). Radian found the average costs in the St. Louis area to be as follows:

<u>no. of nozzles</u>	<u>cost</u>
2	\$6,000
3	\$6,918
6	\$9,669
9	\$12,421
15	\$17,924
20	\$22,510
24	\$26,180
28	\$29,848
30	\$31,683



- o EPA cost estimates, which were prepared prior to the Radian study and which did not utilize bid data, were slightly higher on average. EPA did not estimate costs for stations with more than 15 nozzles.

<u>no. of nozzles</u>	<u>cost</u>
2	\$5,480
3	\$6,990
6	\$11,940
9	\$15,800
15	\$22,840

- o In March 1989, the API comments on the Massachusetts proposed Stage II regulations incorporated a report on Stage II installation costs in St. Louis that was based on survey data provided by member companies. The API study showed average costs of approximately \$1,660 per nozzle. These costs included some elements not included in the Radian estimates, such as costs for time spent on contractor selection and supervision, permit fees, and revenues (or profits) lost during the disruption caused by installation. In addition, a large number of stations involved in the survey conducted underground tank work at the same time as the Stage II work, making it difficult to separate the costs accurately.
- o At the March 1989 hearings on the Massachusetts proposed regulations, petroleum companies and gasoline marketers testified that installation costs being encountered in New York and New Jersey have been considerably higher than estimates based on St. Louis costs.
- o The New York and New Jersey costs appear to involve significant distorting factors, however. Basically, implementation in New York and New Jersey was forced through court actions, and the courts decreed a very short implementation schedule. Due to the shortness of the schedule, the available installation contractors all had more work than they could handle under normal work schedules, and they charged premium prices to try to meet the implementation deadlines. In addition, in New York the gasoline marketers instituted a counter-suit against implementation, and then held off on installation to see the results of that suit. (They lost.) As a result, the schedule was even more compressed in New York. In the Massachusetts Stage II rulemaking proceedings, the Massachusetts Petroleum Council submitted comments in which it noted that contractors were asking double rates to meet compliance schedules in New York and New Jersey. New York air officials have suggested that the unusual complexity of the State's fire safety inspection regulations for service stations may also have contributed to higher costs.

- o The lesson to be learned from the New York and New Jersey experiences is that it is better to take the initiative and move forward with a sensible implementation plan rather than adopt a "wait and see" attitude and end up reacting to lawsuits brought to compel implementation.
- o Maintenance/replacement costs depend on how often the nozzles, nozzle boots, and hoses wear out. Boot tears are not the problem they used to be, since the manufacturers are now making them out of more durable material and there are fewer cars on the road every year with fill pipes under the license plate. The new lightweight coaxial hoses appear not to last as long as the older and heavier "hard-wall" coaxial hoses, but good data on wear are not available. A fair estimate would be that the newer hoses and nozzles both need to be replaced about every two years. A new nozzle costs about \$160, but rebuilds and core trade-ins are available that lower costs to about \$100 per nozzle. Hoses with venturi spillage removal devices currently cost about \$220, and ones without such devices cost about \$130. The outer portion of the coaxial hose can be replaced by itself for about \$87. A boot and faceplate replacement kit is about \$30 (a boot by itself is about \$15). The new generation of boots may have to be replaced about once a year. Thus, a rough estimate of maintenance/replacement costs would be roughly between \$130-200 a year per nozzle (*i.e.*, for each nozzle/hose unit). (This estimate does not include labor and time. Replacements as outlined do not require any special skills and can be done in little time.) EPA's estimate, which was based on older equipment, was \$178 per year.
- o Stage II installation and maintenance/replacement costs are offset to a substantial extent by the gasoline conservation benefits of the controls, especially at larger stations. Gasoline is conserved through the effect the recovered vapors have on the extent of evaporation in the station's underground storage tanks. EPA and MBS have estimated this conservation effect at roughly 2/10 of one percent of the gasoline that is dispensed, or about two gallons out of every thousand pumped. Thus, a station that pumps one million gallons in a year will thus save what it would cost for it to purchase about two thousand gallons. (See pages 2-42 through 2-47 of Vol. 1 of EPA's July 1987 Draft Regulatory Impact Analysis for refueling emissions controls, EPA-450/3-87-001a.)
- o Enforcement costs have been in the range of \$90-\$130 per station annually after the program has passed the start-up/installation phase.
- o Overall, the service station costs passed on to consumers amount to less than one cent per gallon. (Efforts to recover costs at the rate loans must be repaid could increase this to

as much as two cents per gallon for smaller stations during the first five years of the program.)

- o Since the work for installation of the underground piping comprises between 33% and 42% of total installation cost, savings by coordination with UST (underground storage tank) program remediation work are achievable. The exact extent of the savings will depend on the degree of coordination that can be achieved and the amount of remedial work required at stations in a particular area. In some major urban areas, regulators have found that many service stations have already installed Stage II underground piping during UST work in view of the likelihood of eventually having to install Stage II controls.

#### Cost/Effectiveness

- o EPA based its preliminary cost/effectiveness figures on its effectiveness range of 48%-66%, as discussed above. This resulted in a cost/effectiveness range of \$1100/ton to \$850/ton (of emissions controlled) respectively.
- o Cost/effectiveness improves if higher effectiveness is assumed; it improves even more if both higher effectiveness and lower cost are assumed. MBS calculated cost/effectiveness on the basis of 88% effectiveness and the Radian St. Louis cost data and found it to be approximately \$530/ton.

#### Convenience

- o Within the last two years, new corrugated thermoplastic coaxial hoses have been introduced that weigh less than half what the older "hardwall" rubber hoses weighed; and new nozzles have been introduced - such as the Emco Wheaton 4000 series - that are substantially lighter than the previous generation, require far less force to insert, and have more durable boots.
- o When a Stage II program is implemented, there is an initial period when some consumers have some difficulty due to inexperience in knowing what the equipment is and how it works. After a short period, however, consumers become accustomed to, and comfortable with, the technology (particularly if they are educated as to its purpose). It can make a big difference in the public attitude towards Stage II controls if consumers understand that it allows them to take some responsibility for air quality, rather than seeing the new hardware as an "inconvenience".
- o Assertions that Stage II equipment is bulky and difficult to use have been based on experience with earlier generations of the technology. In some areas that implemented Stage II

controls a long time ago, such as the District of Columbia, many stations still have the older equipment in use. This older equipment would not be used, however, in any area that now proceeds with Stage II controls.

- o Recently, the City Council of the District of Columbia voted in favor of legislation that would have required a moratorium on enforcement of the City's Stage II program u starting Jan. 1, 1991 unless by that date all surrounding jurisdictions, or the federal government, took action to require Stage II controls. The bill has now been vetoed by the City's Mayor. Members of the Council who favored the bill went on record as stating that their motivation in favoring this approach was not to abandon Stage II controls, but rather to force the Maryland and Virginia suburbs to honor their 1982 commitment to join the District in implementing Stage II programs.
- o Recent improvements in Stage II hardware have been prompted by expansion of the market resulting from implementation in New York and New Jersey. With Massachusetts soon to begin implementation, Pennsylvania being sued, and other areas considering requirements, competition for the expanding market will stimulate further technological improvements and cost reductions.
- o Occasionally questions are raised as to whether Stage II nozzles are compatible with the fill-pipes of all vehicles. Compatibility in terms of ability to fill the tank have never been a problem, but in the 1970s it was found that the fill pipes of some vehicles did not allow the nozzles to "lock-on" to the fillpipe so effort was not required after insertion. Consequently, in 1976 California required uniform fill pipe standards, and in 1978 automobile manufacturers, in cooperation with Stage II nozzle manufacturers, agreed on SAE standard governing fill-pipe configurations and clearances to facilitate use of Stage II nozzles. These standards went into effect on vehicle models beginning in 1980.

#### Safety

- o Stage II controls present no safety concerns; to the contrary, as noted in the Senate committee report prior to the enactment of the 1990 Amendments, some data indicates that Stage II controls "can prevent about half of all gasolne [sic] fires (both refueling and non-refueling) at gas stations."<sup>1</sup>

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<sup>1</sup> S. Rep. No. 228, 101st Cong., 1st Sess. 41. This effect could be the result of (a) more frequent inspections at service stations using Stage II controls, resulting in better overall maintenance; (b) the fact that most Stage II nozzles have an "interlock" feature that prevents the nozzle from operating if it

- o Onboard controls, on the other hand, pose some fundamentally substantial safety concerns. The principal concerns that have been recognized to date can be divided into five broad categories and summarized as follows:

- Fire/explosion caused by escape of vapors: When the vehicle is refueled, the large volume of vapor in the tank must be transferred to the canister at a high rate. If the vapor is not adequately captured by the canister, it could escape underneath the car or inside the engine compartment and be ignited by hot exhaust components or electrical sparks. Escape of the vapor could occur through a number of failure modes -- for example,
  - a disconnected or broken vapor line leading to the canister, or a damaged canister;
  - a canister that is already wholly or partially saturated because it has not been purged, due to a problem such as blockage of the purge line with charcoal dust, failure of the electronic purge controls, or a dirty filter on the purge air supply for the canister

All of these failure modes have all been consistently observed with current evaporative canister control systems.

In addition, if a particular design used a single canister for both refueling and excess evaporative emissions, hard driving or extended idling during extreme high-temperature weather could cause overloading of the canister and escape of vapor.

- Fire caused by overheating of exhaust system: If the metering of the vapor being drawn into the engine is not exact due to a problem with the fuel system controls, and too much vapor is drawn in and it over-enriches the fuel, it could cause excess hydrocarbons to be sent to the exhaust system and catalytic converter, where they could cause overheating of those elements. If overheating occurs, it could ignite the underbody or raise the temperature of the fuel tank, causing an increase in the generation of vapor, leading to a worsening cycle of over-enrichment, overheating, and overloading of the

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is not completely inserted into the fill pipe; and (c) prevention of gasoline spitback by the boots on most nozzles. The National Transportation Safety Board, in its September 14, 1987 comments to EPA, also observed that Stage II controls appear to improve safety.

canister. This is a problem that NHTSA has observed repeatedly with the current evaporative canister systems.

-- Overpressurization of fuel tank during refueling: If the canister is already saturated during refueling, or a vapor line is blocked, the vapor in the fuel tank could not escape at a rate necessary to provide for the incoming gasoline. The result could be overpressurization resulting in fuel spurting out of the fill pipe or damage to the fuel tank. An overpressure relief valve could prevent this, so long as the valve did not malfunction, but it could allow the escape of a large volume of vapor in an area of the vehicle where it was not expected by a motorist, leading to a higher likelihood of ignition. This problem has been observed with testing of onboard system prototypes.

-- Hesitation or stalling during driving: If there is a problem with the purge system in sending the correct amount of vapor to the engine, this could cause hesitation or stalling at a critical point in driving, such as pulling onto a highway or pulling out to pass. While liquid fuel is relatively easy to pump at a steady rate, it is difficult to draw refueling vapor to the engine at a steady rate because the vapor molecules do not desorb from the charcoal at an even rate, the air flow is created by engine vacuum rather than a pump, and blockages in the purge air flow could occur rather easily as a result of problems such as a dirty filter, moisture, or obstruction of the purge system with dirt or charcoal. Driveability problems, in addition to posing a hazard by themselves, could lead to increased tampering with the onboard systems, increasing the other risks discussed above and below. This problem has been observed with testing of onboard system prototypes.

-- Post-crash fire caused by leaking fuel: An onboard system would require larger and more complex connections to the fuel tank, increasing the potential for leakage of gasoline in a crash. In addition, location of the additional onboard hardware in the vicinity of the tank, particularly in "crush zones", increases the chances that the fuel tank will be pierced or ruptured.

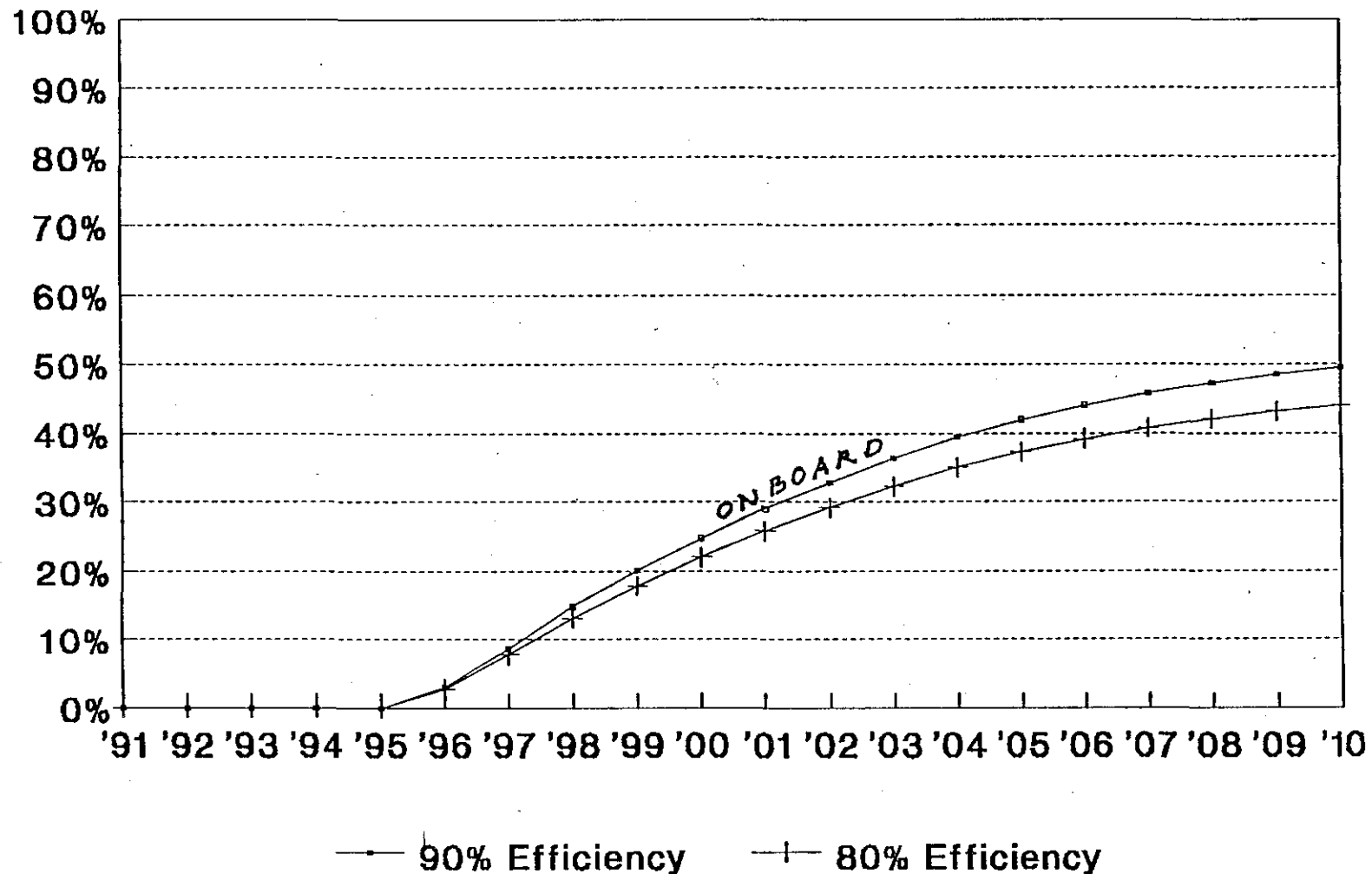
o Safety concerns such as these, and the safety advantages of Stage II controls, have been remarked on by many governmental entities and safety organizations, including the National Highway Traffic Safety Administration (DOT), the National Highway Administration, the National Safety Council, the National Transportation Safety Board, the American Medical Association, the Insurance Institute for Highway Safety, and the American Coalition for Traffic Safety. These concerns

will be addressed in the safety consultation between EPA and DOT required by the Clean Air Act Amendments of 1990.

Stage II Program Elements To Be Addressed

- o Equipment certification (most areas are simply allowing equipment certified under the California program)
- o Installation standards (e.g., slope of underground piping and use of high-hang hose retractors)
- o Implementation period and phase-in schedule, if any (in coordination with UST remedial requirements, if possible)
- o Exemptions, if any, for small independent stations
- o Inspection of the installation
- o Permits and fees, if any
- o In-use inspections and compliance mechanisms
- o Public education
- o Enforcement/administrative budget

## Percent Of Gasoline Throughput Controlled By Onboard And Stage II Controls Over Time



Source: Data derived from The Motor Fuel Consumption Model: Fourteenth Periodical Report prepared by Energy and Environmental Analysis, Inc. for the Department of Energy. The complete methodology used may be obtained from MBS upon request.



State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
**RECEIVED**  
FEB 20 1991  
AIR QUALITY DIVISION

# A CHANCE TO COMMENT ON

CONTROL OF VAPORS FROM GASOLINE DISPENSING STATIONS  
NOTICE OF PUBLIC HEARING

Hearing Date: February 20, 1991

Comments Due: February 25, 1991

- WHO IS AFFECTED:** Gasoline dispensing stations in Clackamas, Multnomah and Washington Counties.
- WHAT IS PROPOSED:** The Department of Environmental Quality is proposing to amend OAR 340, Division 22.
- WHAT ARE THE HIGHLIGHTS:**
- 1) Gasoline vapors contribute to the formation of ozone air pollution. The proposed rules address the control of gasoline vapors at gasoline dispensing stations.
  - 2) Gasoline station owners would be required to install Stage I vapor recovery systems (if they have not already done so) and Stage II vapor recovery systems.
  - 3) The vapor control changes would need to be done by no later than December 31, 1993 (earlier for larger volume stations) or at the time of Underground Storage Tank (UST) compliance work, whichever occurs sooner.
- HOW TO COMMENT:** Copies of the complete proposed rule package may be obtained from: Air Quality Division, Department of Environmental Quality, 811 S.W. Sixth Avenue, Portland, OR 97204 or the regional office nearest you. For further information contact Merlyn Hough at (503) 229-6446.

A public hearing will be held before a hearings officer at:

1:30 p.m.  
February 20, 1991  
Department of Environmental Quality  
Conference Room 3A  
811 SW Sixth Avenue  
Portland, OR 97204

Oral and written comments will be accepted at the public hearing. Written comments may be sent to the DEQ, but must be received by no later than February 25, 1991.

*If you ever had to use this shepherd device you sure would think twice before you bought. There is more gas spilled & used. It is a mess. a stupid invention.*

FOR FURTHER INFORMATION:

Contact the person or division identified in the public notice by calling 229-5696 in the Portland area. To avoid long distance charges from other parts of the state, call 1-800-452-4011.

*that some one is making a bad copy.*  
*Leo E. Durr*

LEO DENN  
5610 FINN  
KLAMATH FALLS, OR 97601



811 S.W. 6th Avenue  
Portland, OR 97204

11/1/88

WHAT IS THE  
NEXT STEP:

After public hearing the Environmental Quality Commission may adopt rule amendments identical to the proposed amendments, adopt modified rule amendments on the same subject matter, or decline to act. The adopted rules will be submitted to the U.S. Environmental Protection Agency as part of the State Clean Air Act Implementation Plan. The Commission's deliberation should come in April 1991 as part of the agenda of a regularly scheduled Commission meeting.

MLH:a  
PLAN\AH11281

REQUEST FOR EQC ACTION

Meeting Date: April 26, 1991  
Agenda Item: J  
Division: HSWD  
Section: SWR

**SUBJECT:**

Solid Waste Planning and Recycling Grant Rules.

**PURPOSE:**

Adopt rules to implement Oregon Revised Statute (ORS) 459.294, legislation passed in the 1989 legislature, by establishing program requirements for the solid waste planning and recycling grant program.

**ACTION REQUESTED:**

- Work Session Discussion
  - General Program Background
  - Potential Strategy, Policy, or Rules
  - Agenda Item  for Current Meeting
  - Other: (specify)

Authorize Rulemaking Hearing

Adopt Rules

- Proposed Rules
- Rulemaking Statements
- Fiscal and Economic Impact Statement
- Public Notice

Attachment A  
Attachment B  
Attachment C  
Attachment D

Issue a Contested Case Order

Approve a Stipulated Order

Enter an Order

Proposed Order

Attachment



811 SW Sixth Avenue  
Portland, OR 97204-1390  
(503) 229-5696



Meeting Date: April 26, 1991  
Agenda Item: J  
Page 2

<input type="checkbox"/> Approve Department Recommendation	Attachment	<input type="checkbox"/>
<input type="checkbox"/> Variance Request	Attachment	<input type="checkbox"/>
<input type="checkbox"/> Exception to Rule	Attachment	<input type="checkbox"/>
<input type="checkbox"/> Informational Report	Attachment	<input type="checkbox"/>
<input type="checkbox"/> Other: (specify)	Attachment	<input type="checkbox"/>

**DESCRIPTION OF REQUESTED ACTION:**

The Environmental Quality Commission (Commission/EQC) is requested to adopt the Solid Waste Planning and Recycling Grant rules, as proposed in Attachment A.

The proposed rules contain the following key elements:

- Describe grant limitations.
- Describe eligible grant projects.
- Describe grant selection criteria.
- Describe grant approval process.
- Describe grant agreements and conditions.
- Describe grant application process.

**AUTHORITY/NEED FOR ACTION:**

<input type="checkbox"/> Required by Statute: _____	Attachment	<input type="checkbox"/>
Enactment Date: _____		
<input checked="" type="checkbox"/> Statutory Authority: <u>ORS 459.295</u>	Attachment	<u>E</u>
<input type="checkbox"/> Pursuant to Rule: _____	Attachment	<input type="checkbox"/>
<input type="checkbox"/> Pursuant to Federal Law/Rule: _____	Attachment	<input type="checkbox"/>
<input type="checkbox"/> Other:	Attachment	<input type="checkbox"/>
<input checked="" type="checkbox"/> Time Constraints: (explain)		
None required by law.		

**DEVELOPMENTAL BACKGROUND:**

<input type="checkbox"/> Advisory Committee Report/Recommendation	Attachment	<input type="checkbox"/>
<input checked="" type="checkbox"/> Hearing Officer's Report/Recommendations	Attachment	<u>F</u>
<input checked="" type="checkbox"/> Response to Testimony/Comments	Attachment	<u>G</u>
<input checked="" type="checkbox"/> Prior EQC Agenda Items: January 31, 1991	Attachment	<u>H</u>

Meeting Date: April 26, 1991  
Agenda Item: J  
Page 3

\_\_\_ Other Related Reports/Rules/Statutes:

Attachment \_\_\_

\_\_\_ Supplemental Background Information

Attachment \_\_\_

The 1989 Oregon Legislature passed a fifty cent per ton surcharge on domestic solid waste received at disposal sites except transfer stations. This surcharge went into effect on July 1, 1990. Under ORS 459.295 the money from this surcharge is authorized to be used for several purposes, including grants to local governmental units for recycling and solid waste planning activities (ORS 459.295(2) (e)). The statute allows the Department of Environmental Quality to award the grants, but does not give procedural direction for doing so. The Department of Justice recommended that rules be adopted to implement the statute and specify the criteria and process to be used in awarding the grants.

The Department formed a work group that included individuals from outside the Department to help develop the proposed rule. Members were recruited from the Metropolitan Service District, the Solid Waste and Solid Waste Reduction Advisory Committees, the Association of Oregon Counties, and the League of Oregon Cities. The Solid Waste Advisory Committee and the Solid Waste Reduction Advisory Committee also reviewed the proposed rules and provided comments.

The Department held four public hearings on the proposed solid waste planning and recycling grant rules in Bend, LaGrande, Medford and Salem February 25 through 28, 1991. Nineteen people attended the hearings, and oral and written comments were received from twelve people.

**REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:**

No new significant concerns were raised during the public comment period that had not already surfaced during the rule drafting process. However, comment was received from local government representatives regarding the following aspects of the proposed rules:

- The grant limitation of \$50,000,
- The proposed split for awarding recycling and solid waste planning grants,
- The proposal not to require a local government match, and
- Using pressing financial and environmental need as factors in the selection criteria.

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In addition, comments on several other issues were received. See Attachment G.

**PROGRAM CONSIDERATIONS:**

No additional considerations have been brought to light during the public comment period on the proposed rules. See Attachment H for considerations stated in the January 31, 1991 EQC staff report.

**ALTERNATIVES CONSIDERED BY THE DEPARTMENT:**

1. Should there be a \$50,000 ceiling for the amount of each grant?

A ceiling of \$50,000 for each grant was initially proposed in the draft rules because that was the amount the Department estimated a community would need to develop a solid waste plan, and in order to ensure that a number of projects would get funded.

Several local government representatives testified during the public comment period that \$50,000 was an insufficient amount of money to develop a multi-jurisdictional solid waste plan. Furthermore, concern was expressed that the \$50,000 grant ceiling indicated the Department was not committed to multi-jurisdictional solid waste planning.

The proposed grant rules are not intended to be a vehicle to drive policy relative to local versus regional solid waste planning efforts. However, because the cost for preparing a solid waste plan was unknown, efforts were made to determine this. CH2M Hill, a consulting firm that prepares waste plans, and METRO, were contacted. Variables such as size of the jurisdiction, population, extent of regulatory and public participation requirements, the availability of existing waste stream data, special waste considerations, etc. make it impossible to get an exact cost for developing a plan. However, CH2M Hill estimated it would cost \$50,000 to \$75,000 to develop a "bare bones" plan, and \$100,000 to \$150,000 for a more comprehensive plan. Costs could not be further refined for local and multi-jurisdictional plans because of the variables mentioned above.

Several states with recycling grant programs were contacted in an effort to determine the potential costs of recycling projects. The cost range is variable, but the states contacted have awarded recycling grants for projects well

below \$50,000. For example, in 1990 the Nebraska Department of Environmental Control awarded grants for \$1000 for the purpose of coordinating office paper recycling, \$2000 for the purchase of a glass crusher, \$10,000 to a county for the purpose of contracting with a private hauler to transport recyclable materials from a rural to urban area, etc.

The advantage of not having a ceiling for any single grant is that this would allow the Department maximum flexibility to respond to various needs, particularly during the first grant round where the exact needs are unknown. This would assist in accommodating the wide variability of grant applications that are anticipated.

2. How should dollars be split between recycling and solid waste planning projects?

The Department initially proposed in the draft rules that up to 20% of the grant funds be reserved for demonstration recycling projects, leaving 80% of the funds available for solid waste planning or general recycling projects.

The goal in implementing the grant program is still to award 20% of the funds to recycling demonstration projects. If, however, no applications are received for these kinds of projects, the Department needs to retain flexibility to award 100% of the available dollars to solid waste planning or general recycling projects. Therefore, language in Section 340-83-060 of the rule has been changed to allow that flexibility.

It is hoped that available dollars will be awarded roughly evenly between recycling and solid waste planning projects, but that will be determined in part by the kinds of applications that are received. The rule, as proposed, allows flexibility to respond accordingly.

3. Should grants be 100% or should a match of some kind be required?

The Department originally proposed that a match from local governments not be required because the intent of the grant program is to help financially strapped governments who might not be able to meet the match requirement.

The Department still believes that a match requirement may exclude some communities; however, cash or in-kind contribution has been added to the rules as a factor in the selection criteria rather than requiring a match.

The advantage of adding cash or in-kind contributions as a factor to the selection criteria is that preference could be given to projects with local support. Such projects, it is argued, have the best chance for success, all other factors being equal. At the same time, this would not eliminate a project with considerable merit from being funded if a local government were unable to provide cash or in-kind contributions.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

1. The Department recommends that there not be a ceiling for any grant award.

The recommendation would allow local governments to apply for and receive grant awards for large, solid waste planning projects, but would not eliminate grant awards for smaller projects. It would also assist in meeting a key objective of the grant program, which is to give grant money to communities with the most pressing environmental needs.

2. The Department recommends leaving the rules flexible in terms of how grant funds are split, with the goal of the program continuing to be that recycling demonstration projects receive 20% of the grant funds, with the remaining funds evenly divided between solid waste planning and general recycling projects.

In keeping with maintaining maximum flexibility, the draft rules have been changed so that up to 100% of the available funds could be used for general recycling or solid waste planning projects. This would allow the Department to fund these projects if no recycling demonstration project applications were received.

The recommendation strikes a balance between funding demonstration recycling, general recycling, and solid waste planning projects. This would provide the Department time to analyze, over the next two years, what the actual needs are for each program area. The funds could be split differently in the future if the analysis shows that one program has more pressing needs or more project proposals than the others.

3. The Department recommends that cash or in-kind contribution be added to the rules as a factor in the selection criteria, but not a required match.



The recommendation would give preference to local governments able to solicit cash or in-kind contributions from their community in the grant selection process. Community support in the form of cash or in-kind contributions could be an important factor for the success of a project. It can be argued that getting cash or in-kind contributions from the community reflects a local government's commitment to the success of the project. At the same time, this would not eliminate grant awards to local governments with worthy projects who are unable to get contributions.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

The rules are consistent with pollution prevention and other goals of the strategic plan, agency policy and implementation of legislative direction.

ISSUES FOR COMMISSION TO RESOLVE:

1. Does the Commission agree that the rules should allow flexibility in distribution of funds between demonstration, solid waste planning, and general recycling projects, rather than locking in specific dollar amounts available for each type of project?
2. Does the Commission agree that there should be no ceiling on the grant amounts?
3. Is it appropriate to add cash or in-kind contributions as a factor in the selection criteria as a measure of the applicant's long-term commitment?

INTENDED FOLLOWUP ACTIONS:

If adopted by the Commission, the Department will implement the proposed rules.

Approved:

Section: Jan Whitworth

Division: Stephanie Hallock

Director: Jill Hen

Report Prepared By: Jacquie Moon  
Phone: 229-5479  
Date Prepared: April 5, 1991

## ATTACHMENT A

### Solid Waste Planning and Recycling Grant Rules

#### Purpose and Scope

340-83-010 (1) These rules are intended to implement Oregon Revised Statute (ORS) 459.294(2)(e), under which grants are made available to local government units for recycling and solid waste planning activities.

(2) The purpose of the recycling and solid waste planning grants program is to provide grant funds to cities and counties in Oregon who are in need of financial assistance to plan for solid waste management options and to improve their recycling capabilities. In addition to improved recycling capabilities these grant funds will be available for recycling demonstration projects that contribute to the development of new technology or advance new unproven concepts in recycling.

#### Definitions

340-83-020 As used in these rules unless otherwise specified:

- (1) "Applicant" -- the local government unit applying for a grant.
- (2) "Commission" -- the Environmental Quality Commission.
- (3) "Department" -- the Department of Environmental Quality.
- (4) "Director" -- the Director of the Department of Environmental Quality.
- (5) "Grant round" -- the period of time in which the Department opens the acceptance of new applications for funding and ends with the disbursement of grant awards from available funds.
- (6) "In-kind contribution" -- any documented contribution, other than cash, to a grant project of real estate, goods or services, which is provided by the grantee or another contributor.
- (7) "Local government unit" -- a city, county, metropolitan service district formed under ORS chapter 268, sanitary district or sanitary authority formed under ORS chapter 450, county service district formed under ORS chapter 451, regional air quality control authority formed under ORS 468.500 to 468.530 and 468.540 to 468.575 or any other local government unit responsible for solid waste management.

(8) "Permanent disposal capacity" -- the local governing unit owns or has access for at least the next twenty years to a solid waste disposal facility meeting at least minimum Department standards.

(9) "Permit" -- a document issued by the Department, bearing the signature of the Director or the Director's authorized representative which by its conditions may authorize the permittee to construct, install, modify or operate a disposal site in accordance with specified limitations.

(10) "Rolling stock" -- motorized vehicles on tires or wheels that have generalized usage such as collection trucks, garbage trucks, forklifts, trailers, tractors.

### Eligible Applicants

340-83-030 Any local government unit may apply to the Department for a grant for solid waste planning, a general recycling project or a recycling demonstration project. Local governments may enter into contracts with private citizens or companies to accomplish the work outlined in the grant agreement.

### Eligible Projects

340-83-040 (1) Eligible solid waste planning projects. Grants may be awarded for up to 100 per cent of the cost of projects and project-related costs, including but not limited to the following types of projects:

- (a) Evaluation of long-term disposal options;
- (b) Evaluation of disposal options due to imminent landfill closure or required upgrade;
- (c) Planning disposal options for special wastes;
- (d) Preparation of a solid waste management plan;
- (e) Planning for new disposal options or sites;
- (f) Other planning activities.

(2) Eligible general recycling projects. Grants may be awarded for up to 100 per cent of the cost of projects and project-related costs, including but not limited to the following types of projects:

- (a) Planning and implementing a community-wide recycling and collection program, or expanding existing collection operations;
- (b) Purchasing equipment or material to initiate or expand the recovery or processing of materials;
- (c) Enhancement or development of a recycling promotion and education program;
- (d) Establishing recycling depots.

(3) Eligible recycling demonstration projects. Grants may be awarded for up to 100 per cent of the cost of projects and project-related costs, including but not limited to the following types of projects:

- (a) Development of new technology in the field of recycling or waste reduction;
- (b) Demonstration or pilot project for a new or unproven recycling concept.
- (c) Developing methodologies or specialized equipment to increase collection, processing or utilization of materials;
- (d) Waste reduction research aimed towards preventing generation of solid waste at source.

### **Ineligible Activities and Costs**

340-83-050 (1) The following are ineligible for grant money under these rules:

- (a) Disposal site engineering, design or hydrogeologic study required by Department permit or enforcement action.
- (b) Costs for which payment has been or will be received under another financial assistance program.
- (c) Capital expenditures for solid waste planning.
- (d) Costs incurred prior to issuance of a grant agreement by the Department.
- (e) Costs incurred after the expiration date of the grant agreement.
- (f) License applications or permit fees.
- (g) Ordinary operating expenses of local government, such as salaries and expenses of a mayor or city council members, that are not directly related to the project.
- (h) Capital expenditures for rolling stock.
- (i) Costs incurred for landfill closures.

### **Grant Limitations**

340-83-060 The Department may award up to 20 per cent of available grant moneys for recycling demonstration projects, and up to 100 per cent of the available grant moneys for solid waste planning or general recycling projects.

### **Selection Criteria**

340-83-070 (1) Solid waste planning project grants will be awarded based on the following criteria. The Department will determine the relative value of each of these factors in deciding which projects will receive funding. The criteria include:

- (a) Degree of need. Preference will be given to:
  - (A) Applicants in need of environmentally sound permanent solid waste disposal capacity.
  - (B) Applicants facing imminent closure of local landfill or required upgrade.
  - (C) Communities with limited financial resources for solid waste planning.
- (b) General.
  - (A) Applicant's proven ability to carry out project as evidenced by credentials, experience and degree of completeness provided in the application.

(B) Multi-jurisdictional cooperation/multi-jurisdictional approach.

(C) Transferability of project results to other governmental units.

(D) Degree to which the project will result in new information or will be addressing unanswered questions for the grantee.

(E) Evidence of cash or in-kind contribution from the community.

(2) General recycling project grants will be awarded based on the following criteria. The Department will determine the relative value of each of these factors in deciding which projects will receive funding. The criteria include:

(a) Degree of need. Preference will be given to:

(A) Applicants farthest from markets.

(B) Applicants with limited recycling opportunities in the jurisdiction.

(C) Communities with limited financial resources for recycling activities.

(b) Impact on the waste management hierarchy.

(A) Per cent of total solid waste stream reduced.

(B) Extent to which project results in reduction or removal of a new material not previously separated from the solid waste stream.

(C) Extent to which project may result in increased recycling, reuse, or source reduction resulting from increased participation of solid waste generators in the commercial, institutional, or residential sector.

(c) General.

(A) Applicant's proven ability to carry out project as evidenced by credentials, experience and degree of completeness provided in the application.

(B) Multi-jurisdictional cooperation/multi-jurisdictional approach.

(C) Transferability of project results to other governmental units, nonprofit organizations or private business.

(D) Evidence of cash or in-kind contribution from the community.

(3) Recycling demonstration projects will be awarded based on the following criteria. The Department will determine the relative value of each of these factors in deciding which projects will receive funding. The criteria include:

(a) Transferability of project results to other governmental units, nonprofit organizations or private businesses.

(b) Extent to which the project will result in new information or will address unanswered questions.

(c) Extent to which project results in the development of a new recycling market for use of a material that would otherwise be disposed.

(d) Adequate resources to go to the next step if the grant is for one phase of a project.

(e) Applicant's proven ability to carry out project as evidenced by credentials, experience and degree of completeness provided in the application.

- (f) Evidence of cash or in-kind contribution.
- (g) Impact on hierarchy: Extent to which project would impact source reduction or reuse.

#### Application and Procedure for Award

340-83-080 (1) The Department shall establish and publish notice of deadlines for submission of applications for each grant round at least once per biennium if revenue is available. The Department will determine the amount of funds available for the current grant round and may set the amount of funding for general recycling grants, recycling demonstration grants, and solid waste planning grants.

(2) An applicant shall provide a complete application for each grant applied for. Application shall be made on a form provided by the Department. Each application shall include such information as shall be required by the Department, including but not limited to:

- (a) Description of the project and the expected results.
- (b) Workplan and schedule for completion of project.
- (c) Complete budget, including breakdown of costs.
- (d) Person responsible for the project.
- (e) A statement of compatibility with local land use requirements, if appropriate.

(3) If sufficient moneys are not available to fund all applications received during a grant round, the Department shall rank the applications within each grant category and award grants by descending order of ranked scores.

(4) Qualified applicants who do not receive a grant award can apply again during the next grant round.

(5) The Department may award some, none or all of the grant moneys available in any grant round.

(6) The Department reserves the right to award grants in amounts less than requested by the applicant. The Department shall make that determination based on the merits of the application, the project proposed, and the availability of grant moneys.

#### Review and Approval

340-83-090 (1) A completed grant application must be reviewed by the Department prior to approval.

- (2) To get approval, the following criteria must be met:
  - (a) Application must be complete.
  - (b) Grant money must be available; and
  - (c) Project must be eligible under these rules.

(3) Grants shall be awarded to applicants based on approved applications ranking highest in selection criteria for solid waste planning, for general recycling projects, or recycling demonstration projects.

(4) The Department may award at least one grant in each program area during each grant round.

(5) When applications in any one grant category have the same score, the grant will be offered to the applicant whose complete application was received on the earliest date.

#### Grant Agreements and Conditions

340-83-100 (1) Following approval and selection of the application, the Department and the applicant shall enter into an agreement. The agreement shall include but is not limited to the following conditions:

- (a) Applicant's responsibility for progress reports;
- (b) Monitoring requirements;
- (c) End date--term of project and grant;
- (d) Method of payment;
- (e) Terms and conditions of the grant;
- (f) Requirement for sharing of information resulting from project; and
- (g) Final report.

(2) The Department may allow an extension of time for a grantee to complete a project, upon receipt from the grantee of acceptable documentation of need.

(3) The Department may at any time review and audit requests for payment and make adjustments for, but not limited to, math errors, items not built or bought, unacceptable constructions, or lack of progress under the grant.

ATTACHMENT B

**RULEMAKING STATEMENTS  
for  
Proposed Rules for Awarding Grants to  
Local Governmental Units for  
Solid Waste Planning and Recycling Grants**

OAR Chapter 340, Division \_\_\_\_\_

Pursuant to ORS 183.335, these statements provide information on the intended action to adopt a rule.

**STATEMENT OF NEED:**

Legal Authority

The 1989 Oregon Legislature passed a 50 cent per ton surcharge on domestic solid waste received at disposal sites except transfer stations. Under ORS 459.295 the money from these fees is authorized to be used for several purposes, including grants to local governmental units for recycling and solid waste planning activities (ORS 459.295(2)(e)). ORS 459.045(3) allows the Commission to adopt rules on other subjects as necessary to carry out ORS 459.255 to 459.385. The Commission is adopting rules necessary to carry out ORS 459.295(2)(e).

Need for the Rules

The rules are needed to establish project eligibility, selection criteria and grant limitations. Prospective applicants will know what kinds of projects to propose and will understand the Department's mechanism and criteria for selection.

Principal Document Relied Upon

Oregon Revised Statutes, Chapter 459.

**LAND USE CONSISTENCY STATEMENT:**

The proposed rules appear to affect land use and appear to be consistent with Statewide Planning Goals and Guidelines.

With regard to Goal 6 (Air, Water and Land Resources Quality), the rules provide assistance to local governments to help them recycle materials and to do solid waste planning activities, and thus enhance the quality of air, water and land resources.

With regard to Goal 11 (Public Facilities and Services), the rule incorporates criteria for selecting and funding governmental projects with the best potential for increased benefits to the



public in the areas of solid waste planning and recycling activities. Local government solid waste management services should be enhanced by these rules.

The rules do not appear to conflict with other Goals.

Public comment on any land use issue involved is welcome and may be submitted in the manner described in the accompanying NOTICE OF PUBLIC HEARING.

It is requested that local, state and federal agencies review the proposed action and comment on possible conflicts with their programs affecting land use and with Statewide Planning Goals within their expertise and jurisdiction.

The Department of Environmental Quality intends to ask the Department of Land Conservation and Development to mediate any apparent conflicts brought to our attention by local, state or federal authorities.

WT\SK3240 (1/91)

## ATTACHMENT C

### FISCAL AND ECONOMIC IMPACT STATEMENT

#### I. Introduction

The rules implement a single statement in Oregon Revised Statute (ORS) 459.295(2)(e) which allows grants to be awarded to local governmental units for solid waste planning and recycling projects. The legislature authorized \$250,000 as available for these grants through June 30, 1991.

The rules establish project eligibility standards and selection criteria for awarding the grants.

#### II. General Public

The general public is not directly affected economically by these rules. The funds used for the grants is from the 50 cent per ton fee on in-state solid waste disposed. It is anticipated that \$1,334,000 will be collected from tipping fees for the period 7/1/90 to 6/31/91. Roughly 20% - 25% of this money will be used for the grant program. The general public pays that fee indirectly.

A successful recycling grant project in their area may bring new opportunities for citizens to increase their recycling abilities, possibly lowering their long-term waste disposal costs.

Solid waste planning grants will help ensure that proper disposal facilities will continue to be provided for the public.

#### III. Small Business

The grants are available only to local governmental units. Small (private) businesses would not be affected unless they are involved with local government in either solid waste planning or in recycling projects. The proposed rules allow a local government unit to enter into contracts with private citizens or companies in order to implement an approved project. In that case small businesses may benefit by being the indirect recipient of some of the grant revenue.

#### IV. Large Business

The same remarks are true for large businesses.

#### V. Local Governments

Only local governments are eligible to apply for these awards and will directly be affected by the rules. The grants may help a community or area to introduce or improve a recycling project. The money could also be used to do planning for solid waste disposal or for other solid waste planning activities. The

\$250,000 initially authorized by the legislature to be spent this biennium is proposed by staff to be split between three programs, solid waste planning, demonstration recycling, and general recycling activities.

#### VI. State Agencies

State agencies are not eligible for grant monies to be awarded under these rules. The Department has determined it will require a minimum of 1.2 FTE to administer the grant program.

Oregon Department of Environmental Quality

## A CHANCE TO COMMENT ON...

Proposed Rules for Awarding Grants to Local Governments  
for Solid Waste Planning and Recycling Projects

Hearing Dates: 2/25, 26, 27, 28/91

Comments Due: 3/8/91

- WHO IS AFFECTED:** Municipal governments that may want to apply for grants for solid waste planning and/or recycling projects.
- WHAT IS PROPOSED:** The Department of Environmental Quality is proposing to adopt rules to implement ORS 459.295(2)(e).
- WHAT ARE THE HIGHLIGHTS:** The proposed rules will set out project eligibility requirements, grant selection criteria and grant limitations.
- HOW TO COMMENT:** Send comments and/or requests for a copy of the complete proposed rule package to:
- Hazardous and Solid Waste Division  
Department of Environmental Quality  
811 SW Sixth Avenue  
Portland, OR 97204

For further information, call Jacquie Moon at (503) 229-5479.

Public hearings will be held:

- |  |  |
|--|--|
| February 28, 1991<br>1:00 p.m. to 3:00 p.m.<br>Chemeketa Comm. College<br>Bldg. 3, Rm. 118 & 119<br>4000 Lancaster Dr., NE<br>Salem, OR<br>(Handicap accessible) | February 25, 1991<br>1:30 p.m. to 3:30 p.m.<br>Jackson County Courthouse Auditorium<br>10 South Oakdale<br>Medford, OR |
| February 27, 1991<br>9:00 a.m. to 11:00 a.m.<br>City Hall<br>1000 Adams Avenue<br>La Grande, OR  | February 26, 1991<br>9:00 a.m. to 11:00 a.m.<br>School Admin. Bldg. Conf. Rm. 330<br>520 NW Wall Street<br>Bend, OR    |



811 S.W. 6th Avenue  
Portland, OR 97204

11/1/86

### FOR FURTHER INFORMATION:

Contact the person or division identified in the public notice by calling 229-5696 in the Portland area. To avoid long distance charges from other parts of the state, call 1-800-452-4011.

A Chance To Comment  
Proposed Rules for Awarding Grants to Local Governments  
for Solid Waste Planning and Recycling Projects  
Page 2

Oral and written comments will be accepted at the public hearing. Written comments may be sent to the DEQ, but must be received no later than 4:00 p.m. March 8, 1991.

WHAT IS THE  
NEXT STEP:

After public hearing, the Environmental Quality Commission may adopt a rule identical to the proposed rule, adopt a modified rule on the same subject matter, or decline to act. The Commission's deliberation may come in June as part of the agenda at a regularly scheduled meeting.

WT\SK3213 (1/91)

#### ATTACHMENT E

**459.293 Policy.** The Legislative Assembly finds and declares that:

(1) Domestic solid waste disposal capacity is a matter of state-wide concern;

(2) The disposal in Oregon of domestic solid waste generated both outside and within Oregon will reduce the total capacity available for disposal of domestic solid waste generated in this state;

(3) The disposal in Oregon of domestic solid waste generated outside Oregon and within Oregon will add to the level of environmental risk associated with the transportation and disposal of those wastes; and

(4) It is in the best interest of the public health, safety and welfare of the people of Oregon to reduce the amount of domestic solid waste being generated in Oregon in order to extend the useful life of existing domestic solid waste disposal sites and to reduce the environmental risks associated with receiving waste generated outside Oregon at those sites. [1989 c.333 §151]

Note: See note under 459.292.

**459.294 Additional fees for reduction of domestic solid waste and environmental risks; assessment; maximum fee.**

(1) In addition to the permit fees provided in ORS 459.235, the commission shall establish a schedule of fees to begin July 1, 1990, for all disposal sites that receive domestic solid waste except transfer stations. The schedule shall be based on the estimated tonnage or the actual tonnage, if known, received at the site and any other similar or related factors the commission finds appropriate. The fees collected pursuant to the schedule shall be sufficient to assist in the funding of programs to reduce the amount of domestic solid waste generated in Oregon and to reduce environmental risks at domestic waste disposal sites.

(2) For solid waste generated within the boundaries of a metropolitan service district, the schedule of fees, but not the permit fees provided in ORS 459.235, established by the commission in subsection (1) of this section shall be levied on the district, not the disposal site.

(3) The commission also may require submittal of information related to volumes and sources of waste or received material if necessary to carry out the activities in ORS 459.295.

(4)(a) A local government that franchises or licenses a domestic solid waste site shall allow the disposal site to pass through the

amount of the fees established by the commission in subsection (1) of this section to the users of the site.

(b) If a disposal site that receives domestic solid waste passes through all or a portion of the fees established by the commission in subsection (1) of this section to a solid waste collector who uses the site, a local government that franchises or licenses the collection of solid waste shall allow the franchisee or licensee to include the amount of the fee in the solid waste collection service rate.

(5) The fees generated under subsection (1) of this section shall be sufficient to accomplish the purposes set forth in ORS 459.295 but shall be no more than 50 cents per ton. [1989 c.333 §152]

Note: See note under 459.292.

**459.295 Use of additional fees.** (1) The fees established by the commission under ORS 459.294 shall be deposited in the General Fund and credited to an account of the department. Such moneys are continuously appropriated to the department to carry out the purposes set forth in subsection (2) of this section.

(2) The fees collected under ORS 459.294 shall be used only for the following purposes:

(a) To implement the provisions of ORS 459.411 to 459.417.

(b) Department of Environmental Quality programs to promote and enhance waste reduction and recycling state wide, including data collection, performance measurement, education and promotion, market development and demonstration projects.

(c) Department of Environmental Quality activities for ground water monitoring and enforcement of ground water protection standards at domestic solid waste landfills.

(d) Solid waste planning activities by counties and the metropolitan service district, as approved by the department, including planning for special waste disposal, planning for closure of solid waste disposal sites, capacity planning for domestic solid waste and regional solid waste planning.

(e) Grants to local government units for recycling and solid waste planning activities.

(f) To pay administrative costs incurred by the department in accomplishing the purposes set forth in this section, the amount allocated under this subsection shall not exceed 10 percent of the fees generated under ORS 459.294. [1989 c.333 §153]

Note: See note under 459.292.

STATE OF OREGONDEPARTMENT OF ENVIRONMENTAL QUALITYINTEROFFICE MEMO

TO: Environmental Quality  
Commission

DATE: February 28, 1991

FROM: Anne Cox, Hearing Officer

SUBJECT: Public Hearing, Proposed Rules for Solid Waste Planning  
and Recycling Projects: Grants for Local Governments,  
Medford, Oregon, 1:30 p.m., February 25, 1991

On February 25, 1991, a public hearing regarding proposed rules for solid waste planning and recycling project grants was held at the Jackson County Courthouse Auditorium, 10 South Oakdale, Medford, Oregon. Six people attended the meeting and two people provided oral testimony.

Testimony given is as follows:

Ken Hagen, Rogue Valley Council of Governments, suggested that we might make allowance for transportation costs involved in recycling, perhaps provide a transportation subsidy. We need to study how to better deal with transportation costs. He asked if the grants are geared to new and innovative recycling techniques.

The hearing closed for a few minutes and then was reopened to take further testimony.

Sue Densmore said that she represents the southern Oregon region. She has told her people they would be able to apply for grants. She said the rules should be for the small city or small, staffed counties rather than for the big cities. She said to look at all of the different areas of the state. We are farther from the market. It should be open for opportunity for small communities and those farther away from the markets to apply. She said it should be in the rules who will be included on the selection panel. The finalists should have personal interviews. The panel members should have a clear understanding of specific issues. There should be people on the panel from outside the DEQ, perhaps from OSSI or the EQC.

The public hearing was concluded at about 2:25 p.m.

AC:k  
WT\SK3340

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: February 28, 1991

TO: Environmental Quality Commission

FROM: Anne Cox, Hearing Officer, Hazardous & Solid Waste  
Division

SUBJECT: Public Hearing, Proposed Rules for Solid Waste  
Planning and Recycling Projects: Grants for Local  
Governments, Bend, Oregon, 9 a.m., February 26, 1991

On February 26, 1991, a public hearing regarding proposed rules for solid waste planning and recycling project grants was held at the School Administration Building, Room 330, 520 NW Wall Street, Bend Oregon.

Four people attended the hearing. No one gave written or oral testimony at this hearing.



STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: March 25, 1991

TO: Environmental Quality Commission

FROM: Bradford D. Price, Hearings Officer



SUBJECT: Public Hearing for the Solid Waste Planning and Recycling Projects: Proposed Rules for Grants to Local Governments, La Grande, OR, 9:00 a.m., February 27, 1991.

On Wednesday, February 27, 1991, a public hearing was held regarding the solid waste planning and recycling projects: proposed rules for grants to local government. The hearing was at the City Hall in the Council Chambers at 1000 Adams Avenue in La Grande Oregon.

Three people testified. Their testimony is as follows:

Pat Wortman, Wallowa County Commissioner: Eastern Oregon has some unique circumstances due their vast regional size and lack of population. Wallowa County has a population of 7,000 people and operates a solid waste program that has one solid waste landfill, for three incorporated cities and two unincorporated entities. It is not feasible for these outlying communities to transport recyclables to the county's landfill. The three incorporated cities do transport to the landfill through a collection transfer station. Recycling and solid waste is a problem. Last year Wallowa County worked with Magpie Recycling, a group of volunteer individuals that feel strongly about recycling. They provide their efforts as a community service.

Enterprise is 64 miles away from Interstate 84, and then 100 - 150 miles away from any recycling facility. Operations to ship recyclable have ran in the red. It is difficult to acquire volunteers. The program has been on again/off again which is detrimental to the success of the program. Wallowa County has conducted educational programs within their schools to make people aware of the recycling. Mr. Wortman believes the time and atmosphere is right for doing recycling however the county has to have some financial help in conducting recycling efforts. Wallowa is a small county and 50% federally owned. Resources is the county's tax base (timber and agriculture), and some minor tourism. Measure 5 is coming down and trying to provide health care for the county is a tremendous financial

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load. Health care will be difficult to implement without reaching out for financial assistance. There are no extra dollars to finance recycling and recycling will be a financial situation.

Wallowa County has no scales at their landfill to weigh their waste, but pay their tipping fee at a steady rate per capita. The tipping fee constitutes one fourth (1/4th) of the income generated from the county's solid waste facility. Therefore, Wallowa County faces financial hardship trying to approach solid waste issues. The county needs to acquire help from these grants and or relief from the solid waste rules and regulations. If some sort of suspension from the rules for a short term was allowed the county could acquire interested persons, get the programs up and running, and acquire some market for what they are trying to recycle. Presently, the income from what the county recycles does not pay for the transportation out of their area.

Mr. Wortman appreciated the opportunity to provide testimony and that DEQ conducted the public hearing in eastern Oregon.

Steve Bogart, Baker County Courthouse: Mr. Bogart appreciated the opportunity to testify in eastern Oregon. It is wonderful that state agencies are willing to reach out and individuals do not have to travel to provide input.

Mr. Bogart represents Baker County. There are six small communities within Baker County and solid waste/recycling is a difficult situation and sore spot for these communities. Each have their own landfill. These landfills are dispersed throughout the County. Baker is a sparsely populated county with highly dispersed populations. These smaller communities operate their own landfills. Baker City is the exception being that they contract with a private solid waste firm. However, the cities of Halfway, Richland, Huntington, Sumptor, Unity and Haines all operate their own landfill. This operation has been an arduous burden on these landfills to maintain the existing DEQ regulations. However, the alternatives are filling the gullies, ravines and back roads with solid waste as was done in the past. These areas have made a concerted effort to maintain the landfill facilities. Two of the communities own their landfills and the others have to negotiate with the BLM and Forest Service to operate their landfills. Therefore, some of these landfills come under state jurisdiction and federal rules, which have made it more difficult for them to maintain a landfill. Because of the size of the communities, they do not have the ability to institute a viable recycling program. There has been an effort recently to coordinate a more comprehensive recycling program and solid waste management

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Page 3

program. This grant program may encourage Baker County's initiative of a more comprehensive recycling and solid waste program.

Mr. Bogart is intimately aware of recycling efforts because he was on a Board of Directors for a program which ran the recycling effort in Baker City. The business operated for a number of years, but eventually left the business because it was a net loss situation. The operator had a net loss the last two years of an excess of \$10,000. It was not a viable alternative.

Mr. Bogart addressed specific areas of the solid waste grant program:

1. Allocation of funds to areas of greatest need. The greatest need are those areas that are most in danger of losing the ability to operate a landfill or to dispose of their solid waste. Many jurisdictions in eastern Oregon and especially small communities fall into that category.
2. Stretching the limited dollars available to maximize long-term statewide benefits. If the grants could assist small communities initially, it can be reflected to other small communities and then to larger communities around the state. Smaller communities may have the demands that may not be the greatest in terms of mass, but it is also one of the things that need to be recognized, that Oregon is a state of small communities.
3. An equitable distribution of funds is another important concern. The equitable distribution would be those areas that have been pointed out is where the need is the greatest and where the most benefit can be derived from those funds.

Pilot projects may be an option for small community coordinations to conduct recycling programs.

4. Providing for innovative and improved solid waste management. In eastern Oregon, solid waste has been one of those things that has been ignored probably for a longer period of time than most others because they haven't had to deal with it. Eastern Oregon has abundant lands and abundant sites to hide their solid waste. Addressing the solid waste problem now is probably one of those things what may

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be innovative for eastern Oregon but may be old hat for the more populated areas of the state.

Mr. Bogart believes the solid waste grants may offer a great opportunity for everybody statewide but primarily for eastern Oregon in discovering how beneficial it could be to have a comprehensive solid waste management program. Mr. Bogart hopes that DEQ can utilize these grant programs to most effectively address eastern Oregon solid waste problems.

Clarine Kissire, Mayor of Halfway: Ms. Kissire is the mayor of Halfway, a very small community. The population is less than 400 people. A lot of these laws and regulations that Halfway are forced to meet are unfair. Halfway does not have the problems that big cities have, like in Portland with their industrial areas and their hospital zones. Senator Hatfield told Ms. Kissire that regardless of the size of the perpetrator, it takes the same amount of money to clean up polluted land area or river or stream. Ms. Kissire is not asking for permission to pollute or destroy the environment but is asking for modifications or variances of solid waste rules and regulations to meet Halfway's situation, because Halfway's needs are far different than the big cities.

Halfway's landfill property is leased from the BLM. BLM tells the community what they can put on the out there. DEQ regulates the community, EPA has come out with new regulations and Ms. Kissire is now concerned of when OSHA is going to step in and tell the local community what to do. Ms. Kissire realizes that people have to start thinking very seriously about recycling, but small eastern Oregon communities do not have the money to do this.

All that Halfway's citizens have been able to do so far is think about the recycling problem. They haven't been able to take any action. Halfway is sixty some miles from Baker and their closest recycling area is Ontario. There is no way of financing a recycling effort. Ms. Kissire is very concerned about recycling because she remembers back when she was a child in Halfway when all the gullies and back roads were filled with dumps and that it was costly then to try and clean that up.

Ms. Kissire sincerely hopes that DEQ can settle this recycling problem because it is becoming more difficult for these little communities to even exist. Ms. Kissire believes that if the mayors and those who are in charge of the landfills could all get together at a meeting maybe they could work something out. The recycling issue is a problem and Ms. Kissire is concerned.

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STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMO

TO: Environmental Quality Commission      DATE: March 1, 1991

FROM: Jacquie Moon, Hearing Officer  
Hazardous and Solid Waste Division

SUBJECT: Public Hearing, Proposed Rules for Solid Waste Planning  
and Recycling Projects: Grants for Local Governments,  
Salem, Oregon, 1:00 p.m., February 28, 1991

On February 28, 1991, a public hearing regarding proposed rules for solid waste planning and recycling project grants was held at Chemeketa Community College, 4000 Lancaster Drive N.E., Salem, Oregon. Five people attended the meeting and one person provided oral testimony.

Testimony given is as follows:

Glen Higgs, Columbia County Department of Land Development Services, had several concerns. He said, judging by the selection criteria developed for solid waste planning grants, all the Department wants to do is to fund crisis situations. He suggested we change the selection criteria so that applicants planning for the future could compete for grant funding, for example, multi-jurisdictions going together to do a 5-year plan.

His second concern was that the selection criteria didn't have value weights attached to them. He didn't think the selection criteria in the rules were of equal importance, and suggested we attach different value weights to each.

Glen's third concern was that he thought rolling stock should be eligible for grant funding. He said certain types of rolling stock such as a chipper truck would be valuable in rural areas. He didn't think it was necessary for the Department to fund 100% cost of the rolling stock, but some funding should be considered.

His fourth concern was that we were not requiring matching funds from grantees. He suggested that if one of our key objectives is to spread the money equitably, we should think about requiring matching funding funds.

His last concern was that the selection criteria for eligible recycling activities was missing something. He suggested that we use size and number of customers in the service area to reflect

To: Environmental Quality Commission  
Subject: Public Hearing, Proposed Rules for Solid Waste Planning  
and Recycling Projects  
March 1, 1991

degree of need. He does not want us to use population of the jurisdiction to reflect need.

The public hearing was concluded at about 2:30 p.m.

JM:b  
G:\YB10340

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: March 11, 1991

TO: Environmental Quality Commission

FROM: Jacquie Moon, Hearing Officer

SUBJECT: Written Testimony: Proposed Solid Waste/Recycle  
Grant Rules

Written testimony was received by the Department in response to a request for public comment regarding proposed solid waste/recycle grant rules establishing project eligibility requirements, grant selection criteria and grant limitations for the grant program

A summary of the written testimony follows.

Dave Leonard, Director of Douglas County Public Works Department, said that the grant limitation of \$50,000 is not appropriate in all cases. He noted that the Department established a maximum grant of \$50,000 because that was the estimated amount a community would need to develop a good solid waste plan. He pointed out that "In the case of Douglas County, and Southwest Oregon, landfill solid waste planning should focus on a multi-jurisdictional planning boundary which may consist of parts or all of from three to five counties." This type of regional planning would cost approximately \$150,000. He stressed the importance of viewing solid waste disposal as a regional problem requiring a regional solution.

Mr. Leonard said that the Department should not use financial need as a selection criteria for awarding grants. Instead, he recommended using "greatest rate of return". He also suggested that grant money should be expended in areas which would realize the greatest likely improvement in environmental boundary conditions.

Mr. Leonard's further said that a local match should be required. He recommended a local match share of 25-50%, and noted that the match could depend on such factors as expected rate of return, population benefitted, population served, or least cost-benefit ratios.

Mr. Leonard's last comment was that funds should not be split between recycling and solid waste planning projects. "Effective solid waste planning will result in more effective recycling".

Glen Higgins of Columbia County Land Development Services submitted written testimony as well as oral testimony. He pointed out that the "selection criteria" and "eligible activities" for solid waste planning grants indicated that the Department was only interested in "crisis planning". That is, the proposed selection criteria would result in grants being awarded to jurisdictions lacking environmentally sound permanent disposal capacity, rather than to jurisdictions planning for the present or future. He opposes this approach. Second, he noted that the selection criteria did not have point values attached; he wondered if the Department considered each criteria as equal. Third, he said capital expenditures for rolling stock should be allowed, though perhaps not at 100%. Fourth, he suggested that the selection criteria for eligible recycling projects should use size and number of customers in the service area to reflect the degree of need. He strongly opposed using population of the jurisdiction to reflect need.

William E. Puntney, president of Clayton-Ward Company suggested the rules should contain the addendum, "No grants shall be given to local governments until they have demonstrated that their past or current actions are not in competition with, or detrimental to, private enterprise recycling companies."

Dennis L. Wade of Organic Waste Recyclers owns a full scale model of an in-vessel composting machine located in Union County. He is interested in applying for a grant through a municipal government in order to test the machine on various organic waste streams. He would like the Department to encourage one of the municipalities in Oregon to seriously consider his project.

Maxwell Lieurance, County Judge from Malheur County, sent a letter of support for the grant program, and commented that the rules seemed to be aimed at counties like his with limited expertise and resources.

The Curry County Oregon Board of Commissioners (Rocky McVay, David Werschkul, and Peg Reagan) said that the \$50,000 grant limit seems to discourage regional solid waste planning, and encourages individual solid waste planning. They recommended that we amend the ". . . rules to encourage 'macro' planning which should be a principal goal of the state."



STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: March 18, 1991

TO: Environmental Quality Commission

FROM: Jacquie Moon, Hearing Officer

SUBJECT: Response to Testimony/Comments, Proposed Solid Waste Planning and Recycling Grant Rules

The Department held four public hearings on the proposed solid waste planning and recycling grant rules in Bend, LaGrande, Medford and Salem February 25-28. Written public comment was accepted until March 8, 1991. Nineteen people attended the hearings. Oral and written comments were received from twelve people, nine of whom represented government entities.

All public comment generally supported the proposed rules. However, some specific concerns were raised. Comments received primarily focused on the following issues:

1. Amount of Grant Limitation

\* Comment: The grant limitation of \$50,000 is too low and should be raised in order to adequately fund multi-jurisdictional solid waste planning efforts. The proposed rules seem to be encouraging individual county rather than multi-jurisdictional solid waste planning by setting a grant limit of \$50,000.

\* Response: The grant limitation of \$50,000 was selected in part because it would maximize the opportunity for a number of local governments to receive grants given the limited amount of total grant dollars available. However, as public testimony pointed out, \$50,000 is not adequate to fund some multi-jurisdictional solid waste plans. The Department, recognizing the unintentional effect that the \$50,000 grant limit may have on multi-jurisdictional solid waste planning efforts, has recommended eliminating the \$50,000 for each grant. The rules proposed for adoption do not set a limit for any single grant award.

2. Local Government Match Requirement

\* Comment: In order to stretch the limited dollars available and maximize long term, statewide benefit, we should require local government to provide a match for each grant.

\* Response: The Department believes that a match should not be required because financially strapped local governments may have difficulty coming up with the money. However, giving additional points in the grant selection process to an applicant who has cash or in-kind contributions has merit in that it will recognize an applicant's commitment relative to their ability and willingness to obtain monetary or community commitment to implement the project. The proposed rules have been modified to add cash or in-kind contribution as a factor in the selection criteria. It is not proposed to be a mandatory requirement.

3. Grant Funds Split Between Solid Waste Planning and Recycling

\* Comment: Grant funds should not be split between solid waste planning and recycling projects. No recommendation was proposed on how grant funds should be distributed; however, it was pointed out that solid waste planning activities result in more effective recycling.

\* Response: The statute directs grants be used for "recycling and solid waste planning activities", although it does not mandate a 50/50 split. Given that the specific needs in terms of potential solid waste planning and recycling projects are unknown at this time, and that there are critical needs in both areas, the Department's goal be a 50/50 split in awarding grants for recycling and solid waste planning activities. The proposed rules are written to provide flexibility for awarding grants; they do not mandate a 50/50 split. This decision will be reevaluated in two years when the solid waste planning and recycling needs become known through the grant application process.

4. Allowable Uses for Grant Funds

\* Comment: Capital expenditures for rolling stock should be allowed.

\* Response: The Department's intent is to prohibit the purchase of vehicles which could be used for activities unrelated to recycling. However, it is reasonable to fund any rolling stock which does not have generalized usage. The definition of rolling stock has been modified in the proposed rules to clarify this.

\* Comment: Transportation costs for recycling activities should be eligible for grant funding, perhaps by providing a transportation subsidy for communities a long distance from markets. Rural areas have the most

need for financial assistance to help in transporting recyclable materials.

\* Response: The Department recognizes that rural communities need assistance in this area, and distance from market is a factor in the selection criteria. Also, the proposed rules do not prohibit the use of grant funds for transportation costs, or prohibit an applicant from applying for a grant to look at more cost effective ways to transport recyclables to market.

5. Selection Criteria (who should receive a grant)

\* Comment: Financial need should not be used as a criteria for grant selection; instead, award grants based on the "greatest rate of return" and the greatest likely improvement in "environmental boundary conditions".

\* Response: Agency staff and various advisory groups evaluated the desirability of using financial need as a selection criteria, and concluded that it was desirable. The Department believes that it is important to direct funds to areas that have worthy projects or priority needs that might not otherwise have revenue to address these needs.

\* Comment: Solid waste criteria should not give preference to jurisdictions lacking environmentally sound permanent disposal sites over jurisdictions planning for the present and future.

\* Response: \$250,000 a year is not enough money to fund all worthwhile projects. Communities lacking sound permanent disposal sites are facing pressing environmental problems with few resources to address those problems. Therefore the Department believes they should receive help through the grant program.

\* Comment: The selection criteria should not be considered equal: they should have different value weights attached to them. This should be clarified in the rules.

\* Response: The Department agrees that the selection criteria have different value weights. However, the points for the selection criteria were left out of the rules because it provides an opportunity to evaluate the effectiveness of the point system established during the first grant round without having to amend the rules. A statement has been added to the proposed rules which clarifies that the selection criteria have different value weights and that the Department will determine the relative value.

\* Comment: Grants should be used for small rather than large cities and counties. Small communities have the most pressing environmental and financial needs.

\* Response: The Department developed a set of selection criteria to give preference for grant funding to small communities with the greatest needs. This met a number of key objectives, including stretching the limited dollars available to maximize long term, statewide benefit. However, the Department also believes that larger communities with well developed basic recycling programs should be able to receive grant funding to look for innovative ways to deal with their solid waste management issues. Twenty percent of the grant funds have been set aside for these demonstration recycling projects.

\* Comment: The Department should add, under the selection criteria for recycling grants, an indicator of the size of a service area. This would provide information on whether a service area provider would get enough of a particular material to justify the costs associated with collecting and selling it.

\* Response: The Department believes it will be able to select feasible projects for grant funding without adding the size of the service area. In the grant application process applicants will be asked questions aimed at getting information such as feasibility of the project proposal.

\* Comment: Grants should not be awarded to local governments until they have demonstrated that their past or current actions are not in competition with, or detrimental to, private enterprise recycling companies.

\* Response: The purpose of the grant program is to provide opportunities for improved recycling programs at the local level. Local government is ultimately responsible for providing the opportunity to recycle, therefore it is appropriate that they receive the grant dollars. In addition, local government may enter into contracts with private citizens or companies to accomplish the work outlined in the grant agreement. The Department does not view the availability of grant dollars to local government as detrimental to private enterprise.

## 6. Grant Selection Method

\* Comment: The rules should specify who the members of the grant selection committee will be, and state that the committee will include members from outside DEQ.

\* Response: The grantees should be selected by the Department. It is important to select grantees using an objective basis, and the selection criteria established in the proposed rules will be used to make the selections. It is also important not to risk compromising the process by potential conflict of interest; using committee members outside the Department could do this.

The Department also believes that the selection process should be addressed in the application procedures rather than in the rules because it provides the opportunity to evaluate the effectiveness of the system during the first grant round. If adjustments are necessary, they can be made in subsequent grant rounds without having to amend the rules.

\* Comment: Grant finalists should have personal interviews.

\* Response: The Department believes this is a procedural matter and unnecessary to address in regulations. In some cases where there are several close scores, applicants may be invited for an oral interview.

\* Comment: DEQ should encourage municipalities to apply for grants for testing promising new equipment.

\* Response: The Department has set aside 20% of the grant money to be used for innovative recycling projects. Local government may use their grants to contract with private citizens and companies to accomplish the work outlined in their grant agreement. Nothing in the proposed rules precludes this activity.

## 7. Miscellaneous

\* Late comment: The Department received one public comment that came in past the March 8 deadline.

\* The Department received public comment at one of the hearings that was unrelated to the proposed rules. The concern was expressed that rural Oregon communities were suffering from having to meet dual regulatory requirements from DEQ and BLM for solid waste disposal. It was suggested that it would be helpful if the Department would modify regulatory requirements until the financially pressed communities could get their finances in order. This comment has been provided to the Department's solid waste permits and compliance program.

# Oregon

ENVIRONMENTAL  
QUALITY  
COMMISSION

**REQUEST FOR EQC ACTION**

Meeting Date: January 31, 1991  
Agenda Item: C  
Division: HSW  
Section: SW and SWR

**SUBJECT:**

Solid Waste Planning and Recycling Projects: Proposed Rules for Grants to Local Governments

**PURPOSE:**

The proposed rules are intended to implement Oregon Revised Statute (ORS) 459.294.(2)(e) by establishing the following rules for solid waste planning and recycling grants:

- grant limitations
- general requirements
- grant selection criteria
- grant approval process
- grant agreements and conditions
- grant limitations

**ACTION REQUESTED:**

- Work Session Discussion
  - General Program Background
  - Potential Strategy, Policy, or Rules
  - Agenda Item  for Current Meeting
  - Other: (specify)





Meeting Date: January 31, 1991  
Agenda Item: C  
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\_\_\_ Other Related Reports/Rules/Statutes:

\_\_\_ Supplemental Background Information

Attachment \_\_\_  
Attachment \_\_\_

The 1989 Oregon Legislature passed a 50 cent per ton surcharge on domestic solid waste received at disposal sites except transfer stations. This surcharge went into effect on July 1, 1990. Under ORS 459.295 the money from these fees is authorized to be used for several purposes, including grants to local governmental units for recycling and solid waste planning activities (ORS 459.295(2)(e)). The statute allows the Department of Environmental Quality (Department) to award these grants, however, the statute does not give direction for selection criteria or method of award. The Department of Justice recommended that rules be adopted to implement the statute and specify the criteria and process to be used in awarding the grants.

Therefore, the Department has formed an informal work group including individuals from outside the Department to develop the proposed rules. Members have been recruited from Metropolitan Service District, the solid waste and solid waste reduction advisory committees, from the Association of Oregon Counties and from the League of Oregon Cities. A list of names and organizations (Attachment F) is attached.

The proposed rules are scheduled for adoption on April 26, 1991. The grant program, once established, will be ongoing, contingent on available revenue.

**REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:**

The public and local governmental units are expected to be highly interested in the grant money and the number of requests for grant money is expected to exceed the legislatively authorized amount of grant monies. Therefore, the Department expects to receive considerable comment on the types of projects eligible for a grant, selection criteria, grant limitations, and method of award. Some of the areas of concern may be:

1. Types of projects. The Department believes that fixed facility capital costs should be eligible for recycling project grants, but not for solid waste planning grants. Recycling operations could require capital investment, however, there should be little or no need for capital expenditures in a planning activity. Local governments should be allowed to pass on the grant funds to private citizens or companies to carry out recycling or planning activities. Grants could be allowed to pay for new staff or for existing staff under specific circumstances.



2. Selection criteria. How do we decide who should get grant funding, and how much funding? The Department has developed a set of selection criteria to determine who will receive grants. The selection criteria address a number of key objectives:

- (1) Targeting funds to areas of greatest need;
- (2) Stretching the limited dollars available to maximize long term, statewide benefit;
- (3) An equitable distribution of funds; and
- (4) Providing for innovative and improved solid waste management.

The Department believes that the program should assist small communities and communities with the greatest need. The Department also believes that larger communities with more resources dedicated to recycling and solid waste management should have the opportunity to propose innovative recycling demonstration projects; therefore 20 per cent of the available funds will be reserved for such projects.

3. Grant limitations. The Department expects to have approximately \$250,000 per year available for the grant program. To maximize the opportunity for a number of local governments to take advantage of the grant monies, the proposed rules place a ceiling of \$50,000 on a single grant, and no community may receive more than \$50,000 in a given year. The ceiling for the grants is proposed to be \$50,000 because that is the estimated cost of a good solid waste planning project. Although we expect to see many recycling grant proposals for less than \$50,000, the Department recommends that the ceiling for planning grants and recycling grants should be the same.

It is proposed that local government matching funds not be required and that grants be awarded for up to 100% of the cost of the project.

The Department recommends that 20 per cent of the available revenue each year be dedicated to grants for recycling demonstration projects. Although not proposed in the rules, it is the Department's intention to divide the remaining revenue each year between grants for solid waste planning and grants for recycling program activities or projects.

4. Method of award. The Department will decide who receives the grants and the amount of each grant. The rules establish an annual grant cycle. Grant projects will be reviewed and monitored through completion of the grant/project period. The Department will require the

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Agenda Item: C  
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grantee to submit progress reports and a final report on the grant project. The Department may require that the grantee share results of the project with other communities.

**PROGRAM CONSIDERATIONS:**

The statute provides that the 50 cent per ton fee may be used for grants for recycling and solid waste planning activities, and the administration of those grants. The Department has currently budgeted \$250,000 for the first round of grant awards. Additional limitation will be necessary for awards in upcoming biennia. In addition, the Department has determined it will require a minimum of 1.2 full time equivalents (FTE) to administer the grant program.

**ALTERNATIVES CONSIDERED BY THE DEPARTMENT:**

1. Should there be different ceilings or no ceilings for the amount of each grant?

The Department considered grant ceilings of \$50,000 for each program, a lower grant ceiling of \$25,000 for recycling grants, or no ceiling at all for either type of grant.

The Department initially proposed \$50,000 for a solid waste planning grant maximum because that is the amount the Department estimates a community would need in order to develop a good solid waste plan. A \$25,000 maximum recycling grant was proposed in order that more grants in recycling could potentially be awarded, and that \$25,000 was sufficient for many recycling projects. However, both the Solid Waste Reduction Advisory Committee (SWRAC) and the informal work group committee advised a ceiling of \$50,000 for both grants. They believed that some recycling projects might need more than the \$25,000 ceiling. This would not eliminate smaller grants.

The option of no grant ceiling was discussed and rejected. The Department wants to insure that a number of grants can be awarded for the amount of funds available.

2. Should the Department favor recycling projects which take the most material out of the waste stream, or should funds be targeted for local governments with limited financial resources?

Smaller communities are less likely to have available revenue sources to deal with solid waste and recycling problems. The legislative intent was that smaller communities without

sufficient revenue be helped through the grant program. The Department believes it is important to direct funds to areas that have worthy projects or priority needs that might not otherwise have revenue to address these needs.

The Department recognizes the immediate, short term environmental benefit of awarding grant money for projects which take the most amount of material from the waste stream. The Department also recognizes the majority of the revenue supporting the grant program comes from the local jurisdictions who generate the largest volumes of waste. However, the relatively small authorization of \$250,000 is not enough money to have a significant impact on removal of material from the waste stream. Therefore, the Department proposes to set aside up to 20 per cent of available money to fund recycling demonstration projects. This will allow larger communities to successfully compete for a portion of the grant money.

3. Should the available funds be divided between solid waste planning and recycling activities, and if so, in what manner?

Choosing to fund a single program would make more money available for that program. The Department believes there are critical needs in various locations around the state in both program areas. Many areas need to seek new landfill capacity, due to landfills reaching capacity or closing due to the cost of upgrading to minimum landfill requirements. These areas must plan for solid waste alternatives. In addition, there are regions in the state that have difficulty maintaining a recycling program because their transportation costs to market are high. There are other communities that have volunteers who want to start or expand recycling programs but have no funding to purchase basic equipment to handle the source separated materials, or to provide education about recycling. Twelve of the thirty-eight watersheds have curbside participation rates below 10 per cent.

The Department considered several alternatives for dividing the grant funds. Both SWRAC and the informal work group recommended a 50-50 split of funds between the solid waste and recycling programs. The Department's intent is to divide the money equally, provided that a sufficient number of good applications are received in both programs. However, if one program has few or no good applications, the Department would like to be able to shift funds to the other program.

Selection criteria are proposed for three types of grants: solid waste planning, recycling program activities, and recycling demonstration projects. Since criteria are different for each type of grant, projects will be ranked

within their own category. The proposed rules provide that the Department may award a minimum of one grant in each program, and that up to 20 per cent of grant money may be awarded for recycling demonstration projects.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

1. Ceilings. The Department has chosen a ceiling of \$50,000 for each grant program, based on the following:
  - a. It was recommended by both the informal work group and SWRAC.
  - b. The Department's intent is to award several smaller grants rather than one or two large grants.
  - c. The Department estimates that \$50,000 is an adequate amount to develop a good solid waste plan.
  - d. Raising the recycling ceiling to \$50,000 will allow larger projects but will not eliminate awards for smaller grants.
2. Maximum waste removal or limited resources.

The Department recognizes the importance of removing the maximum amount of material from the waste stream and for helping communities with limited resources. Both concerns are addressed in the rules in that communities with limited or no resources will receive the majority of the grant money, yet communities with existing revenue and more sophisticated solid waste programs will be able to receive up to 20 per cent of grant monies for demonstration projects. This follows legislative intent. The long term benefits of all local governments, no matter how small or how sophisticated, taking an active and positive role in addressing their solid waste disposal problems and meeting the recycling needs of their community outweigh the short term benefits of reducing the most waste for the dollar.

3. Division of funds.

The Department intends to set aside up to 20 per cent of the money for recycling demonstration projects and to divide the remaining funds equally between recycling projects and solid waste planning projects. This strikes a balance between the need for recycling programs and solid waste planning activities. Even though the total amount of grant monies available is limited, the Department believes there will be very worthy projects in both areas.

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CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

The rules are consistent with pollution prevention and other goals of the strategic plan, agency policy and implementation of legislative direction.

ISSUES FOR COMMISSION TO RESOLVE:

1. Is the grant limitation of \$50,000 appropriate?
2. Are the selection criteria on track? Is it appropriate to slant grant selection toward local governments who need monetary support for their solid waste or recycling programs?
3. Should the grants be 100 per cent or should there be a required local match?
4. Should the funds be split between solid waste recycling and solid waste planning?

INTENDED FOLLOWUP ACTIONS:

Publication of intent to hold public hearings in the Secretary of State's Bulletin on February 1, 1991, and publication of notice of public hearing in newspapers.

Hold public hearings in Medford (February 25), Bend (February 26), La Grande (February 27), and Salem (February 28).

Receive public comment until March 8, 1991.

Prepare a hearing officer's report for final rule adoption by the Commission on April 26, 1991.

Approved:

Section: Jan Whitworth

Division: Stephanie Hallock

Director: \_\_\_\_\_

Report Prepared By: Anne Cox

Phone: 229-6912

Date Prepared: January 15, 1991

AC/JM:b  
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January 17, 1991

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